UNITED STATES NAVAL OBSERVATORY

CIRCULAR NO. 77

U. S. Naval Observatory, Washington 25, D. C. June 21, 1957

SOLAR SUMMARY FOR 1956

The solar circulars which give the daily results of sunspot measures made at the U. S. Naval Observatory have been printed with the aid of punched cards since January, 1950. These cards have also been used to compile the Summary for 1956.

Table I gives the mean values of A, g, s, and r for each month and for the year.

Table II gives the same quantities for each day.

Table IIIa summarizes for each day the results for each group which was numbered at Mount Wilson. The first line contains the group number. The other lines list, for the entire group, in successive columns:

1. Date of observation: the month, day, and decimal of a day in U. T.
2. The mean heliographic longitude, L.
3. The mean heliographic latitude, φ.
4. The total area, A.
5. The total spot count, s.
6. The number of parts, p, which were listed separately in the monthly circulars.

The quantities L and φ are the unweighted means of the several parts. Hence, the appearance or disappearance of a small spot may affect the day-to-day values of L and φ. Similarly, these may be apparent changes in these quantities when the group is near the limb and the measures are uncertain.

An entry for January at the end of the table refers to 1957.

Table IIIb gives similar data for the unnumbered groups, that is, those marked by an asterisk in the monthly circulars. These groups generally consisted of a small spot which appeared on one day.

Table IV lists groups which may be recurrent. The data are derived from the Mount Wilson results given in the *Publications of the Astronomical Society of the Pacific*, which should be consulted for details of the recurrences.

TABLE I MONTHLY SUMMARY

	A	*g*	*s*	*r*
JANUARY	1763	5.0	32	82
FEBRUARY	3438	8.8	50	138
MARCH	2307	9.1	52	143
APRIL	1795	8.6	37	123
MAY	2812	8.9	49	138
JUNE	2047	8.1	50	131
JULY	2280	8.4	45	129
AUGUST	3623	12.2	68	190
SEPTEMBER	2994	13.1	66	197
OCTOBER	2934	11.2	61	173
NOVEMBER	4696	10.5	86	191
DECEMBER	4102	11.1	72	183
Mean	2899	9.6	56	152

TABLE II DAILY SUMMARY

JANUARY

Date	A	g	s	r
1	568	3	13	43
2	491	2	10	30
3	273	5	42	92
4	273	4	12	52
5	413	4	6	46
6	539	7	12	82
7	303	7	33	103
8	532	6	7	67
9	370	7	20	90
10	439	3	28	58
11	462	4	36	76
12	598	4	53	93
13	1622	6	17	77
14	2181	6	11	71
15	2555	7	25	95
16	3088	6	40	100
17	3313	8	36	116
18	4259	6	42	102
19	3545	6	220	280
20	4654	5	37	87
21	3414	5	44	94
22	3596	6	82	142
23	3853	5	27	77
24	3393	5	25	75
25	3163	5	21	71
26	2159	4	18	58
27	996	3	11	41
28	691	3	8	38
29	657	5	16	66
31	485	4	4	44

FEBRUARY

Date	A	g	s	r
1	965	6	9	69
2	1817	6	20	80
3	1062	6	52	112
4	590	5	26	76
5	331	2	8	28
6	613	3	11	41
7	452	2	8	28
8	306	2	7	27
9	254	3	5	35
10	593	4	6	46
11	2449	6	32	92
12	2734	7	36	106
13	3628	8	38	118
14	4967	9	55	145
15	5592	11	51	161
16	6344	11	91	201
17	6346	11	131	241
18	7140	12	97	217
19	7977	11	72	182
20	7781	13	131	261
21	8282	15	106	256
22	7326	13	54	184
23	5905	16	94	254
24	5399	14	60	200
25	2437	14	88	228
26	2239	13	33	163
27	1556	9	24	114
28	2151	13	45	175
29	2461	10	64	164

MARCH

Date	A	g	s	r
1	3250	7	39	109
2	2249	8	51	131
3	2066	7	29	99
4	2208	7	28	98
5	2227	6	40	100
6	2555	5	16	66
7	2557	6	19	79
8	2685	7	32	102
9	2282	6	38	98
10	1854	5	17	67
11	2860	7	12	82
12	2207	11	33	143
13	3016	11	34	144
14	2887	9	34	124
15	3194	11	49	159
16	1807	12	151	271
17	1977	7	43	113
18	1996	14	140	280
19	2706	9	28	118
20	2636	10	49	149
21	3050	10	36	136
22	3105	13	41	171
23	2509	11	49	159
24	1632	12	170	290
25	2447	13	28	158
26	1880	11	77	187
27	1580	10	42	142
28	1348	10	102	202
29	1915	10	104	204
30	2047	10	52	152
31	779	8	23	103

APRIL

Date	A	g	s	r
1	552	7	22	92
2	645	4	14	54
3	285	8	13	93
4	141	3	5	35
5	378	4	21	61
6	906	5	55	105
7	1197	5	82	132
8	2046	5	31	81
9	2294	7	29	99
10	3871	10	28	128
12	3246	12	40	160
13	3023	12	41	161
14	3010	9	46	136
15	2319	12	125	245
16	2878	14	73	213
17	3047	15	63	213
18	2860	12	28	148
19	2317	15	41	191
20	2287	15	33	183
21	2505	16	52	212
22	2602	13	45	175
23	1584	8	38	118
25	913	7	27	97
26	1290	5	26	76
27	1483	5	22	72
28	520	4	10	50
29	411	3	6	36
30	1652	6	33	93

TABLE II DAILY SUMMARY

Date	A	g	s	r
MAY				
1	2726	6	25	85
2	2659	9	70	160
3	2582	11	105	215
4	2609	9	37	127
5	2762	9	33	123
6	3841	8	19	99
7	3154	11	60	170
8	3301	11	58	168
9	2745	13	92	222
10	3231	13	27	157
11	3241	13	84	214
12	3662	8	46	126
13	3650	9	39	129
14	2693	8	54	134
15	2339	8	42	122
16	2003	8	52	132
17	2644	10	38	138
18	2189	11	61	171
19	2430	9	36	126
20	2835	9	34	124
21	2445	10	45	145
22	1609	7	43	113
23	1333	5	26	76
24	1913	7	45	115
25	2668	6	39	99
26	2728	5	19	69
27	2925	7	73	143
28	3855	9	70	160
29	4395	8	50	130
30	3491	10	37	137
31	2501	8	61	141
JUNE				
1	1913	6	68	128
2	1946	8	105	185
3	2235	5	21	71
4	1922	6	55	115
5	2154	7	46	116
6	2283	8	41	121
7	1894	8	42	122
8	2009	5	31	81
9	1237	4	11	51
10	1012	9	14	104
11	1033	7	17	87
12	814	7	32	102
13	1051	10	34	134
14	1415	11	35	145
15	1939	10	41	141
16	2421	8	32	112
17	2263	11	60	170
18	2076	8	139	219
19	2668	8	70	150
20	2716	10	149	249
21	3163	9	43	133
22	3830	9	71	161
23	3566	9	46	136
24	2575	10	100	200
25	3093	8	23	103
26	1592	7	17	87
27	726	4	12	52
28	1407	9	35	125
29	1999	12	75	195
30	2456	10	51	151

Date	A	g	s	r
JULY				
1	2858	11	27	137
2	2284	10	66	166
3	2123	10	68	168
4	2354	9	25	115
5	1924	10	34	134
6	2421	11	43	153
7	3018	11	27	137
8	2914	10	41	141
9	2522	10	45	145
10	3026	11	38	148
11	2924	13	75	205
12	2982	12	82	202
13	2284	9	74	164
14	2019	9	55	145
15	1817	10	28	128
16	1480	11	34	144
17	1066	9	32	122
18	876	7	25	95
19	912	4	32	72
20	856	3	70	100
21	2217	5	29	79
22	2594	5	83	133
23	3594	5	29	79
24	2342	4	26	66
25	2088	5	35	85
26	2533	5	38	88
27	2562	7	32	102
28	2706	7	16	86
29	1949	9	93	183
30	2339	10	44	144
31	3090	9	38	128
AUGUST				
1	3817	9	39	129
2	2651	11	69	179
3	2371	9	64	154
4	2177	11	84	194
5	3625	11	40	150
6	2743	11	41	151
7	2930	13	57	187
8	3030	9	47	137
9	3003	8	69	149
10	2896	7	80	150
11	3101	9	62	152
12	2544	8	79	159
13	2798	6	24	84
14	3342	7	35	105
15	2743	9	69	159
16	2627	10	51	151
17	2811	13	44	174
18	3442	17	50	220
19	4425	15	49	199
20	5024	19	82	272
21	4500	15	179	329
22	4869	15	107	257
23	5498	16	110	270
24	5113	16	105	265
25	4367	10	27	127
26	5160	16	52	212
27	5487	17	52	222
28	4049	16	71	231
29	5024	18	106	286
30	3189	15	81	231
31	2970	13	81	211

TABLE II DAILY SUMMARY

SEPTEMBER

Date	*A*	*g*	*s*	*r*
1	2399	11	67	177
2	2309	11	55	165
3	2289	8	42	122
4	2232	9	52	142
5	2938	9	56	146
6	4366	11	50	160
7	3780	12	38	158
8	3327	6	28	88
9	3248	5	33	83
10	3848	8	53	133
11	4921	9	60	150
12	5569	15	122	272
13	5304	18	108	288
14	6007	18	77	257
15	4265	21	221	431
16	3133	21	135	345
17	3831	17	54	224
18	2884	16	80	240
19	2832	16	54	214
20	2518	19	55	245
21	1941	18	50	230
22	1708	20	112	312
23	1571	18	102	282
24	1218	9	11	101
25	2045	14	34	174
26	2330	12	27	147
27	1996	10	32	132
28	1772	11	56	166
29	1278	11	96	206
30	1959	9	30	120

OCTOBER

Date	*A*	*g*	*s*	*r*
1	3051	15	59	209
2	3377	12	44	164
3	4628	14	68	208
5	3618	12	61	181
6	3034	10	117	217
7	3027	9	60	150
8	3772	9	50	140
9	3798	8	85	165
10	4667	9	57	147
11	4423	10	64	164
12	4556	11	47	157
13	2748	9	35	125
14	2240	10	16	116
15	2073	10	18	118
16	1528	11	25	135
17	1464	7	17	87
18	1327	8	12	92
19	2109	9	21	111
20	1941	11	208	318
21	2030	14	82	222
23	2762	12	50	170
24	2807	13	43	173
25	2458	13	38	168
26	1772	14	142	282
27	2140	13	97	227
28	3592	11	46	156
29	2907	14	77	217
30	3332	15	78	228
31	3938	11	57	167

NOVEMBER

Date	*A*	*g*	*s*	*r*
1	3475	13	104	234
2	3128	15	110	260
3	4237	14	72	212
4	4920	16	90	250
5	5838	13	122	252
6	7201	15	88	238
7	8992	15	128	278
8	7579	13	124	254
9	6336	11	121	231
10	8055	12	101	221
11	6591	12	111	231
12	5380	12	137	257
13	5289	9	116	206
14	4959	8	83	163
15	6077	11	72	182
16	6597	11	98	208
17	5759	11	129	239
18	5720	10	108	208
19	4885	9	107	197
20	4248	8	41	121
21	3704	7	42	112
22	3158	6	48	108
23	2929	4	37	77
24	2276	4	44	84
25	2424	8	116	196
26	1682	4	24	64
27	2285	9	65	155
28	3049	11	59	169
29	2307	10	39	139
30	1787	13	52	182

DECEMBER

Date	*A*	*g*	*s*	*r*
1	2566	12	48	168
2	1623	17	91	261
3	3920	15	54	204
4	4851	14	93	233
5	4420	10	37	137
6	5367	11	69	179
7	4584	10	62	162
8	3689	13	77	207
9	4655	14	96	236
10	4997	11	64	174
11	2905	9	32	122
12	4728	11	70	180
13	3819	14	96	236
14	3597	15	188	338
15	4358	14	126	266
16	4653	10	49	149
17	4164	11	67	177
18	3841	8	58	138
19	4092	10	51	151
20	3586	5	39	89
21	3577	7	23	93
22	5064	8	55	135
23	4784	11	159	269
24	3874	10	115	215
25	4410	10	52	152
26	5703	9	72	162
27	5072	11	60	170
28	3421	11	60	170
29	3183	14	108	248
30	3809	8	31	111
31	3837	11	41	151

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	*L*	*φ*	*A*	*s*	*p*
		°	°			
11424	1 3.753	74	+27	18	5	2
11426	1 3.753	63	+28	24	5	2
11427	1 3.753	26	−18	32	10	2
	1 4.657	28	−17	64	3	3
	1 5.605	27	−19	146	2	2
	1 6.600	27	−17	121	5	3
	1 7.728	26	−18	52	9	3
	1 8.635	29	−16	48	1	1
	1 9.736	31	−17	16	1	1
11428	1 8.635	338	−22	36	1	1
	1 9.736	343	−24	6	1	1
	1 11.722	340	−24	12	4	1
	1 12.719	338	−25	34	6	3
	1 15.633	323	−26	73	2	1
11429	1 4.657	43	−27	76	5	4
	1 5.605	40	−27	121	2	2
	1 6 600	40	−28	32	1	1
	1 7.728	39	−26	12	1	1
11430	1 6.600	312	−18	24	2	2
	1 7.728	313	−17	42	9	3
	1 8.635	314	−18	109	2	2
	1 9.736	311	−17	18	8	2
11431	1 6.600	292	+23	145	1	1
	1 7.728	296	+24	85	1	1
	1 8.635	295	+24	145	1	1
	1 9.736	295	+24	121	1	1
	1 10.741	295	+24	145	1	1
	1 11.722	297	+23	121	1	1
	1 12.719	295	+25	121	5	3
	1 13.821	295	+23	121	1	1
	1 14.722	294	+23	121	1	1
	1 15.633	294	+23	97	1	1
	1 16.744	290	+25	89	2	2
	1 17.624	293	+25	73	1	1
11432	1 6.600	287	−25	48	1	1
	1 7.728	291	−25	44	3	3
	1 8.635	295	−25	97	1	1
	1 9.736	295	−26	52	7	6
	1 10.741	296	−25	124	26	7
	1 11.722	297	−26	208	30	10
	1 12.719	293	−26	310	41	12
	1 13.821	295	−25	581	10	9
	1 14.722	296	−25	387	3	3
	1 15.633	294	−26	266	4	3
	1 16.744	294	−26	109	4	2
	1 17.624	294	−26	194	2	2
11433	1 7.728	0	−26	18	3	3
11435	1 9.736	259	−30	145	1	1
	1 10.741	259	−30	170	1	1
	1 11.722	258	−30	121	1	1
	1 12.719	257	−30	133	1	1
	1 13.821	256	−29	121	1	1
	1 14.722	257	−30	121	1	1
	1 15.633	252	−30	169	4	4
	1 16.744	249	−30	129	4	4
	1 17.624	255	−30	48	1	1
	1 18.594	251	−29	237	6	4
	1 19.739	248	−34	76	12	3
11436	1 9.736	330	−35	12	1	1
11437	1 13.821	205	+30	339	2	2
	1 14.722	205	+27	485	3	3
	1 15.633	206	+28	642	9	5
	1 16.744	205	+28	681	10	8
	1 17.624	206	+28	580	11	9
	1 18.594	205	+28	741	12	9
	1 19.739	206	+28	539	56	13
	1 20.801	202	+29	679	7	4
	1 21.644	205	+28	323	2	2
	1 22.798	210	+27	278	2	2
	1 23.771	206	+27	242	1	1
	1 24.634	210	+27	194	1	1
11438	1 13.821	316	−17	72	2	2
11439	1 13.821	198	+25	388	1	1
	1 14.722	203	+24	388	1	1
	1 15.633	203	+24	436	1	1
	1 16.744	201	+24	444	4	3
	1 17.624	203	+24	485	1	1
	1 18.594	202	+23	533	4	2
	1 19.739	202	+25	484	13	2
	1 20.801	200	+23	800	3	3
	1 21.644	201	+25	485	1	1
	1 22.798	201	+24	485	1	1
	1 23.771	201	+24	388	1	1
	1 24.634	201	+24	339	1	1
	1 25.731	202	+24	291	1	1
11440	1 14.722	188	+21	679	2	2
	1 15.633	190	+20	872	4	4
	1 16.744	187	+21	1636	16	12
	1 17.624	190	+21	1206	18	11
	1 18.594	188	+21	1925	17	10
	1 19.739	191	+21	1595	91	16
	1 20.801	186	+21	2254	20	13
	1 21.644	188	+21	1860	30	15
	1 22.798	184	+21	2035	37	14
	1 23.771	189	+20	2012	13	8
	1 24.634	187	+20	1611	14	8
	1 25.731	184	+20	1600	9	6
	1 26.580	189	+21	970	2	2
11442	1 17.624	157	+26	145	1	1
	1 18.594	155	+25	145	1	1
	1 19.739	157	+27	73	1	1
	1 20.801	156	+26	61	1	1
	1 21.644	155	+26	16	1	1
11443	1 17.624	142	+25	582	1	1
	1 18.594	142	+26	678	2	2
	1 19.739	144	+29	778	47	11
	1 20.801	141	+26	860	6	5
	1 21.644	140	+26	730	10	5

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	1 22.798	143	+25	641	39	11
	1 23.771	144	+26	775	9	9
	1 24.634	145	+25	715	6	5
	1 25.731	143	+25	723	6	4
	1 26.580	142	+25	726	7	5
	1 27.565	145	+25	533	3	2
	1 28.625	142	+25	291	2	1
	1 29.737	143	+25	291	1	1
11444	1 22.798	98	+34	12	1	1
11445	1 22.798	82	−17	145	2	1
	1 23.771	81	−16	436	3	2
	1 24.634	80	−16	534	3	3
	1 25.731	80	−16	452	3	3
	1 26.580	80	−18	339	4	2
	1 27.565	81	−17	315	4	3
	1 28.625	81	−17	218	3	3
	1 29.737	79	−18	109	3	2
	1 31.617	83	−16	73	1	1
	2 1.562	83	−16	12	1	1
11447	1 25.731	73	+25	97	2	2
	1 26.580	71	+25	124	5	5
	1 27.565	69	+25	148	4	4
	1 28.625	68	+25	182	3	2
	1 29.737	68	+25	84	9	5
11450	1 29.737	349	−36	145	1	1
	1 31.617	351	−36	121	1	1
	2 1.562	350	−36	73	1	1
	2 2.726	351	−36	97	1	1
	2 3.762	348	−37	38	3	2
	2 4.719	349	−37	32	2	1
11451	1 29.737	78	+21	28	2	2
11453	2 1.562	85	+24	24	1	1
	2 2.726	76	+23	387	7	5
	2 3.762	73	+23	548	16	5
	2 4.719	74	+24	194	1	1
11454	2 1.562	0	+25	32	1	1
	2 2.726	2	+26	97	3	2
	2 3.762	1	+25	16	3	1
	2 4.719	0	+26	24	2	2
11455	1 31.617	345	−19	97	1	1
	2 1.562	345	−19	73	1	1
	2 2.726	348	−19	73	1	1
	2 3.762	347	−19	24	2	1
	2 4.719	348	−19	16	3	1
	2 5.631	347	−18	16	1	1
	2 6.737	346	−19	24	1	1
11456	1 31.617	326	+29	194	1	1
	2 1.562	322	+29	751	4	2
	2 2.726	325	+31	1115	7	4
	2 3.762	327	+30	420	26	11
	2 4.719	325	+30	324	18	8
	2 5.631	327	+30	315	7	4
	2 6.737	324	+30	395	9	7
	2 7.549	318	+31	307	7	7
	2 8.549	319	+32	209	6	6
	2 9.790	322	+31	48	2	2
11457	2 2.726	16	+24	48	1	1
	2 3.762	15	+24	16	2	1
11459	2 6.737	244	−16	194	1	1
	2 7.549	244	−16	145	1	1
	2 8.549	244	−18	97	1	1
	2 9.790	245	−16	97	1	1
	2 10.651	247	−18	113	2	2
	2 11.719	247	−16	85	2	2
	2 12.710	244	−16	48	1	1
	2 13.574	245	−15	48	1	1
	2 14.549	245	−15	32	1	1
	2 15.740	246	−15	24	1	1
	2 16.547	244	−16	12	1	1
11460	2 9.790	282	+21	109	2	2
	2 10.651	281	+22	93	2	2
	2 11.719	283	+20	6	2	1
11461	2 10.651	196	+21	339	1	1
	2 11.719	196	+24	339	1	1
	2 12.710	197	+24	291	1	1
	2 13.574	196	+22	291	1	1
	2 14.549	196	+22	291	2	1
	2 15.740	197	+23	291	1	1
	2 16.547	195	+22	339	1	1
	2 17.726	194	+21	380	3	3
	2 18.718	197	+23	388	1	1
	2 19.625	197	+23	291	1	1
	2 20.635	197	+23	339	1	1
	2 21.576	197	+23	291	1	1
	2 22.637	193	+22	242	1	1
11462	2 10.651	198	+17	48	1	1
	2 11.719	187	+22	1733	15	7
	2 12.710	185	+23	1525	21	8
	2 13.574	184	+21	1817	21	11
	2 14.549	185	+21	2109	27	10
	2 15.740	184	+23	1749	20	10
	2 16.547	183	+22	1715	37	11
	2 17.726	184	+23	1217	32	18
	2 18.718	185	+22	1598	29	11
	2 19.625	185	+23	1745	19	10
	2 20.635	183	+23	1477	27	8
	2 21.576	183	+24	1309	19	6
	2 22.637	182	+25	1067	6	3
	2 23.553	178	+23	339	3	1
11463	2 11.719	199	−21	262	11	5
	2 12.710	200	−21	185	8	4
	2 13.574	200	−22	197	5	3
	2 14.549	201	−22	121	4	2
	2 15.740	201	−19	48	1	1
	2 16.547	200	−19	36	1	1
	2 17.726	200	−20	48	1	1
	2 18.718	201	−21	32	1	1
	2 20.635	199	−17	64	5	3
	2 21.576	203	−17	24	1	1
11464	2 11.719	181	−25	24	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
11465	2 12.710	214	−26	6	1	1
	2 13.574	215	−26	16	1	1
11466	2 12.710	164	+22	485	1	1
	2 13.574	164	+20	775	4	2
	2 14.549	164	+19	727	4	2
	2 15.740	168	+21	582	1	1
	2 16.547	166	+19	582	1	1
	2 17.726	167	+21	436	1	1
	2 18.718	166	+20	533	1	1
	2 19.625	166	+21	533	1	1
	2 20.635	164	+21	491	2	2
	2 21.576	165	+21	533	1	1
	2 22.637	167	+22	582	1	1
	2 23.553	166	+22	485	1	1
	2 24.570	166	+22	582	1	1
11467	2 12.710	162	−19	194	3	1
	2 13.574	159	−24	339	3	2
	2 14.549	159	−23	726	9	6
	2 15.740	161	−21	766	11	7
	2 16.547	159	−23	1356	20	10
	2 17.726	159	−22	1712	40	14
	2 18.718	158	−22	1703	22	10
	2 19.625	159	−22	1531	13	6
	2 20.635	159	−22	1207	19	9
	2 21.576	159	−22	1175	14	7
	2 22.637	160	−22	1073	8	6
	2 23.553	160	−20	824	5	3
	2 24.570	158	−21	1018	2	2
	2 25.752	150	−23	194	1	1
11469	2 13.574	156	+17	145	2	1
	2 14.549	154	+17	331	6	3
	2 15.740	155	+18	545	5	4
	2 16.547	152	+17	371	5	3
	2 17.726	155	+18	339	10	6
	2 18.718	157	+18	234	5	4
	2 19.625	159	+19	145	1	1
	2 20.635	159	+21	182	2	2
	2 21.576	160	+19	145	1	1
	2 22.637	159	+19	194	1	1
	2 23.553	159	+20	121	1	1
	2 24.570	159	+20	242	1	1
11470	2 15.740	175	+21	255	4	4
	2 16.547	173	+20	399	9	4
	2 17.726	174	+21	669	21	11
	2 18.718	175	+20	686	14	7
	2 19.625	174	+22	1382	12	7
	2 20.635	175	+22	1567	26	9
	2 21.576	173	+22	2101	21	7
	2 22.637	176	+23	1576	13	7
	2 23.553	172	+23	1212	10	4
	2 24.570	170	+21	242	1	1
11471	2 14.549	142	+20	145	1	1
	2 15.740	138	+22	581	3	3
	2 16.547	138	+20	759	12	5
	2 17.726	141	+23	869	18	11
	2 18.718	141	+22	1077	17	9
	2 19.625	140	+22	1127	16	13
	2 20.635	139	+22	1090	37	12
	2 21.576	140	+22	993	24	5
	2 22.637	140	+24	933	10	4

No.	Date	L	φ	A	s	p
		°	°			
	2 23.553	142	+24	863	24	6
	2 24.570	140	+24	878	13	7
	2 25.752	139	+24	557	13	4
	2 26.599	140	+25	194	1	1
11472	2 15.740	138	+26	145	1	1
	2 16.547	137	+24	145	1	1
	2 17.726	139	+26	145	1	1
	2 18.718	139	+25	194	1	1
	2 19.625	137	+25	145	1	1
	2 20.635	137	+26	145	2	1
	2 21.576	138	+26	145	2	1
	2 22.637	137	+26	121	1	1
	2 23.553	136	+26	169	2	2
	2 24.570	134	+26	157	2	2
	2 25.752	136	+26	169	2	2
	2 26.599	138	+27	145	1	1
11473	2 14.549	132	−23	485	1	1
	2 15.740	130	−22	606	3	3
	2 16.547	130	−24	630	3	3
	2 17.726	131	−22	525	3	3
	2 18.718	134	−22	574	4	3
	2 19.625	135	−22	593	6	5
	2 20.635	134	−21	525	5	5
	2 21.576	133	−22	597	7	3
	2 22.637	136	−19	485	1	1
	2 23.553	135	−18	491	2	2
	2 24.570	135	−19	630	1	1
	2 25.752	133	−20	436	1	1
	2 26.599	136	−18	582	1	1
11476	2 17.726	242	+18	6	1	1
	2 18.718	245	+19	48	1	1
11478	2 18.718	79	−22	73	1	1
	2 19.625	83	−22	97	1	1
	2 20.635	83	−21	48	1	1
	2 21.576	83	−23	24	1	1
	2 22.637	84	−22	48	1	1
	2 23.553	84	−22	32	1	1
	2 24.570	83	−21	61	2	1
	2 25.752	82	−21	32	1	1
	2 26.599	83	−19	24	1	1
	2 27.729	82	−20	32	1	1
11480	2 20.635	76	+23	452	3	3
	2 19.625	81	+22	388	1	1
	2 21.576	75	+23	460	9	6
	2 22.637	76	+23	666	6	4
	2 23.553	77	+24	813	22	8
	2 24.570	78	+25	755	12	7
	2 25.752	78	+24	526	22	6
	2 26.599	79	+25	534	8	6
	2 27.729	80	+25	514	10	4
	2 28.546	77	+26	549	4	3
	2 29.557	78	+26	484	2	2
	3 1.581	77	+26	630	3	2
	3 2.696	73	+24	145	1	1
11481	2 21.576	62	+24	73	1	1
	2 22.637	62	+25	121	1	1
	2 23.553	62	+24	291	8	4
	2 24.570	61	+24	383	12	5
	2 25.752	64	+25	82	18	5

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	2 26.599	60	+26	121	4	2
	2 27.729	62	+25	89	2	2
	2 28.546	61	+26	44	2	2
	2 29.557	59	+27	79	5	2
11482	2 20.635	52	−30	194	1	1
	2 21.576	51	−31	291	3	1
	2 22.637	52	−31	218	4	2
	2 23.553	52	−30	169	4	3
	2 24.570	52	−31	181	4	3
	2 25.752	51	−30	56	7	4
	2 26.599	47	−29	48	3	3
	2 27.729	45	−30	97	2	2
	2 28.546	41	−29	76	3	3
	2 29.557	41	−30	73	1	1
11483	2 23.553	113	+23	30	3	3
11484	2 21.576	54	+16	121	1	1
	2 23.553	56	+17	24	6	2
	2 24.570	56	+19	84	3	2
	2 25.752	58	+19	64	7	5
11485	2 23.553	95	−23	6	1	1
	2 24.570	94	−22	150	5	3
	2 25.752	93	−23	96	6	3
	2 26.599	94	−22	72	2	2
	2 27.729	99	−20	97	1	1
	2 28.546	99	−19	16	1	1
11486	2 23.553	27	−17	36	1	1
	2 24.570	28	−17	36	1	1
	2 25.752	29	−16	16	1	1
	2 26.599	25	−16	16	2	1
	2 28.546	29	−18	12	1	1
11487	2 25.752	11	+25	40	6	2
	2 26.599	6	+24	48	1	1
	2 27.729	12	+23	194	2	2
	2 28.546	11	+23	169	4	4
	2 29.557	12	+23	156	7	5
	3 1.581	11	+23	52	2	2
	3 2.696	13	+24	32	3	2
	3 3.722	12	+21	48	1	1
11488	2 25.752	5	−22	24	1	1
	2 26.599	3	−23	48	2	1
	2 27.729	6	−21	48	1	1
11489	2 25.752	347	−16	145	2	1
	2 26.599	344	−18	290	2	2
	2 27.729	345	−17	339	2	2
	2 28.546	342	−17	262	5	4
	2 29.557	344	−17	169	2	2
	3 1.581	346	−17	133	2	2
	3 2.696	344	−16	151	2	2
	3 3.722	345	−16	133	2	2
	3 4.610	348	−16	145	1	1
	3 5.578	348	−15	109	2	1
	3 6.613	348	−15	121	1	1
	3 7.634	347	−15	145	1	1
	3 8.813	349	−16	170	2	1
11490	2 26.599	67	−24	117	5	5
	2 27.729	70	−25	146	3	2
	2 28.546	70	−25	48	2	2
	2 29.557	69	−24	73	2	2
11491	2 28.546	27	−25	121	4	3
	2 29.557	28	−26	88	4	4
	3 1.581	29	−26	61	1	1
	3 2.696	28	−26	24	1	1
11492	2 28.546	333	+23	327	5	4
	2 29.557	334	+24	339	11	7
	3 1.581	335	+24	319	9	6
	3 2.696	337	+24	225	8	5
	3 3.722	339	+25	509	8	6
	3 4.610	336	+25	411	7	7
	3 5.578	334	+25	625	14	6
	3 6.613	337	+25	969	5	4
	3 7.634	335	+27	897	5	4
	3 8.813	336	+25	824	5	3
	3 9.547	334	+27	484	5	4
11493	2 28.546	325	−25	367	8	7
	2 29.557	326	−24	707	16	8
	3 1.581	326	−24	1430	13	8
	3 2.696	325	−24	1224	27	10
	3 3.722	328	−24	1167	13	9
	3 4.610	326	−24	1022	12	7
	3 5.578	325	−23	1069	17	7
	3 6.613	325	−23	751	3	3
	3 7.634	326	−23	703	2	2
	3 8.813	326	−23	570	6	2
	3 9.547	326	−21	618	4	2
	3 10.665	333	−23	727	1	1
11494	2 28.546	82	−25	40	2	2
11495	2 28.546	62	+18	120	4	4
	2 29.557	62	+19	293	14	8
	3 1.581	63	+18	625	9	6
	3 2.696	63	+18	400	7	5
11496	3 3.722	298	+31	16	1	1
	3 4.610	299	+31	72	2	2
11497	3 2.696	297	+31	48	2	1
11498	3 3.722	16	+22	96	2	2
	3 4.610	13	+22	85	2	2
	3 5.578	13	+24	48	2	2
11499	3 3.722	322	+19	97	2	2
	3 4.610	321	+18	134	3	2
	3 5.578	321	+19	182	3	3
	3 6.613	320	+20	278	4	4
	3 7.634	322	+20	194	2	2
	3 8.813	322	+20	348	4	4
	3 9.547	321	+21	339	7	4

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11501	3	4.610	246	+32	339	1	1
	3	5.578	255	+32	194	2	1
	3	6.613	251	+32	436	3	3
	3	7.634	246	+33	461	5	5
	3	8.813	248	+35	576	11	7
	3	9.547	246	+34	540	14	7
	3	10.665	246	+34	545	7	5
	3	11.801	244	+35	363	3	3
	3	12.727	254	+36	145	1	1
	3	13.711	253	+34	170	1	1
	3	14.881	254	+34	194	2	1
	3	15.717	254	+35	291	1	1
11502	3	7.634	279	−17	157	4	2
	3	8.813	280	−16	165	3	3
	3	9.547	281	−16	234	3	3
	3	10.665	284	−16	194	1	1
	3	11.801	286	−16	194	1	1
	3	12.727	285	−17	194	1	1
	3	13.711	285	−17	170	1	1
11504	3	8.813	240	+27	32	1	1
	3	9.547	238	+26	67	5	2
	3	10.665	239	+26	194	5	2
	3	11.801	239	+26	194	2	2
	3	12.727	241	+27	24	4	2
	3	13.711	240	+26	12	1	1
	3	14.881	238	+27	48	2	1
11506	3	10.665	182	−19	194	3	1
	3	11.801	184	−18	73	1	1
	3	12.727	185	−17	24	1	1
	3	13.711	184	−18	16	1	1
11508	3	11.801	161	+23	1163	3	3
	3	12.727	163	+24	993	16	8
	3	13.711	164	+23	1260	19	8
	3	14.881	163	+24	981	13	5
	3	15.717	164	+24	1034	19	8
	3	16.610	164	+23	642	58	16
	3	17.634	163	+23	625	20	9
	3	18.610	163	+22	848	63	12
	3	19.675	163	+23	969	15	7
	3	20.549	162	+23	1103	24	6
	3	21.605	162	+23	848	9	5
	3	22.550	163	+24	654	6	5
	3	23.548	159	+23	97	1	1
11509	3	11.801	159	−22	485	1	1
	3	12.727	160	−21	436	1	1
	3	13.711	161	−21	485	1	1
	3	14.881	159	−19	461	1	1
	3	15.717	159	−23	517	3	3
	3	16.610	161	−21	412	3	1
	3	17.634	161	−21	485	2	1
	3	18.610	159	−22	388	4	1
	3	19.675	160	−21	485	1	1
	3	20.549	160	−20	436	3	1
	3	21.605	159	−20	533	1	1
	3	22.550	161	−20	436	1	1
	3	23.548	159	−20	436	1	1
11510	3	12.727	189	+44	24	2	1
11511	3	11.801	160	+20	388	1	1
	3	12.727	160	+21	291	1	1
	3	13.711	161	+21	291	1	1
	3	14.881	160	+22	291	2	1
	3	15.717	161	+21	291	1	1
	3	16.610	162	+21	170	1	1
	3	17.634	160	+21	194	1	1
	3	18.610	159	+21	170	1	1
	3	19.675	160	+21	194	1	1
	3	20.549	159	+21	170	1	1
	3	21.605	159	+21	194	1	1
	3	22.550	160	+22	194	1	1
	3	23.548	159	+21	145	1	1
11512	3	12.727	237	+38	52	4	2
11513	3	13.711	211	+17	18	2	2
11514	3	14.881	188	+18	121	3	1
	3	15.717	187	+18	77	3	2
	3	16.610	186	+17	40	10	3
	3	18.610	187	+18	6	1	1
11515	3	13.711	163	+17	158	5	3
	3	14.881	163	+18	379	9	4
	3	15.717	163	+17	242	10	4
	3	16.610	164	+17	80	28	7
	3	17.634	161	+17	133	6	3
	3	18.610	161	+17	46	15	4
11516	3	13.711	129	−21	242	1	1
	3	14.881	128	−18	315	1	1
	3	15.717	130	−21	339	2	1
	3	16.610	130	−19	237	25	8
	3	17.634	129	−19	306	6	4
	3	18.610	131	−21	266	21	11
	3	19.675	130	−20	230	4	2
	3	20.549	130	−20	258	5	4
	3	21.605	131	−20	145	4	1
	3	22.550	132	−19	170	2	1
	3	23.548	132	−18	97	2	1
	3	24.611	131	−21	61	3	1
	3	25.633	131	−18	145	1	1
11517	3	13.711	128	+24	194	1	1
	3	14.881	130	+26	97	1	1
	3	15.717	130	+25	113	2	2
	3	16.610	132	+25	61	1	1
	3	17.634	131	+24	73	2	1
	3	18.610	132	+24	16	5	1
	3	19.675	131	+25	24	1	1
11518	3	15.717	178	+24	32	5	2
	3	16.610	178	+24	22	5	2
	3	18.610	187	+25	6	1	1
11519	3	15.717	133	−25	16	1	1
	3	16.610	133	−24	6	2	1
11520	3	15.717	119	+19	242	2	2
	3	16.610	120	+19	89	9	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	3 17.634	121	+17	161	6	4
	3 18.610	122	+18	108	13	5
	3 19.675	120	+19	101	3	3
	3 20.549	120	+19	32	3	2
	3 22.550	124	+23	16	1	1
11521	3 16.610	125	+30	36	7	2
11522	3 16.610	92	+29	12	2	1
	3 18.610	97	+27	60	8	3
	3 19.675	94	+30	24	1	1
	3 20.549	95	+28	48	3	2
	3 21.605	96	+27	146	3	2
	3 22.550	96	+26	96	4	2
	3 23.548	96	+27	48	6	2
	3 24.611	93	+26	6	4	1
11523	3 18.610	203	+21	16	2	1
11524	3 18.610	107	+19	6	3	1
	3 20.549	105	+18	116	7	4
	3 21.605	106	+19	372	13	6
	3 22.550	106	+19	477	16	5
	3 23.548	107	+19	670	14	8
	3 24.611	105	+17	479	50	11
	3 25.633	110	+21	824	5	4
	3 26.603	108	+17	592	21	5
	3 27.558	106	+21	170	1	1
11525	3 18.610	81	+26	24	1	1
	3 21.605	81	+26	12	1	1
11526	3 18.610	73	+17	36	2	1
	3 19.675	72	+18	97	1	1
	3 20.549	72	+16	61	1	1
	3 21.605	73	+17	73	1	1
	3 22.550	74	+16	61	1	1
	3 23.548	73	+16	48	1	1
	3 24.611	72	+16	22	9	2
	3 25.633	73	+17	36	1	1
11527	3 19.675	59	+33	582	1	1
	3 20.549	57	+31	339	1	1
	3 21.605	57	+32	364	1	1
	3 22.550	57	+31	339	1	1
	3 23.548	56	+31	339	1	1
	3 24.611	57	+33	266	7	5
	3 25.633	55	+33	380	2	2
	3 26.603	53	+31	297	3	2
	3 27.558	54	+34	307	3	2
	3 28.608	50	+34	230	4	2
	3 29.669	51	+36	388	7	3
	3 30.596	51	+37	345	3	2
11528	3 20.549	34	−30	73	1	1
	3 21.605	32	−30	363	2	2
	3 22.550	33	−31	158	3	2
	3 23.548	34	−32	229	10	5
	3 25.633	35	−32	24	1	1
	3 26.603	33	−29	64	6	3
	3 27.558	33	−29	12	1	1
	3 28.608	33	−32	6	3	1
11530	3 22.550	37	−27	85	2	2
	3 23.548	37	−26	158	9	6
	3 24.611	35	−29	242	51	10
	3 25.633	37	−28	230	6	4
	3 26.603	37	−26	48	4	2
	3 27.558	41	−25	52	3	3
	3 28.608	39	−26	6	1	1
	3 29.669	41	−26	6	1	1
11531	3 22.550	22	+21	32	1	1
	3 24.611	22	+25	22	4	2
	3 25.633	20	+23	24	1	1
	3 26.603	22	+23	6	1	1
	3 28.608	19	+23	6	1	1
11532	3 22.550	13	−25	387	2	2
	3 23.548	14	−25	242	3	2
	3 24.611	12	−24	151	20	5
	3 25.633	12	−24	231	3	3
	3 26.603	13	−26	152	18	7
	3 27.558	15	−26	84	7	4
	3 28.608	13	−27	74	25	6
	3 29.669	12	−27	140	29	6
	3 30.596	14	−26	133	7	4
	3 31.687	16	−25	77	3	2
	4 1.606	14	−27	48	2	2
11533	3 24.611	127	+22	143	11	5
11534	3 24.611	85	−25	12	4	1
	3 25.633	85	−24	113	3	3
	3 26.603	85	−26	170	4	2
	3 27.558	86	−24	205	5	3
	3 28.608	86	−25	200	3	3
11535	3 24.611	12	+31	34	4	3
	3 25.633	11	+27	12	1	1
	3 26.603	1	+28	88	8	3
	3 27.558	0	+26	230	7	4
	3 28.608	4	+26	295	26	5
	3 29.669	0	+27	350	30	8
	3 30.596	1	+27	344	14	7
	3 31.687	0	+26	307	9	5
	4 1.606	357	+26	238	12	6
	4 2.569	357	+27	484	11	3
	4 3.764	357	+28	129	3	3
11536	3 24.611	347	−16	194	3	1
	3 25.633	348	−16	218	1	1
	3 26.603	341	−18	197	6	4
	3 27.558	341	−17	246	9	5
	3 28.608	341	−18	185	14	6
	3 29.669	343	−18	155	11	5
	3 30.596	343	−17	197	7	6
	3 31.687	348	−16	89	2	2
	4 1.606	348	−17	61	1	1
	4 2.569	349	−16	48	1	1
	4 3.764	349	−16	24	1	1
11537	3 25.633	53	+25	16	2	1
	3 26.603	49	+25	24	5	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11538	3	25.633	325	−24	194	1	1
	3	26.603	324	−24	242	1	1
	3	27.558	324	−24	218	2	1
	3	28.608	324	−24	133	6	1
	3	29.669	323	−24	121	4	1
	3	30.596	322	−24	134	3	3
	3	31.687	324	−23	121	2	1
	4	1.606	322	−24	97	2	1
	4	2.569	322	−23	97	1	1
	4	3.764	323	−23	32	1	1
	4	4.647	322	−22	16	1	1
11539	3	27.558	56	+31	56	4	4
	3	28.608	54	+30	213	19	4
	3	29.669	55	+31	582	9	3
	3	30.596	56	+32	582	4	3
11540	3	29.669	54	−18	48	8	2
	3	30.596	54	−16	234	7	3
11541	3	29.669	36	−22	28	4	2
	3	30.596	35	−21	42	3	3
	3	31.687	36	−21	101	3	3
11542	3	29.669	278	+20	97	1	1
	3	30.596	279	+18	24	1	1
	3	31.687	278	+20	24	1	1
	4	1.606	280	+19	24	1	1
	4	3.764	279	+19	28	2	2
11543	3	30.596	10	+22	12	3	2
	4	1.606	10	+22	48	2	2
11544	3	31.687	342	−13	12	1	1
11546	3	31.687	265	+21	48	2	1
	4	1.606	266	+21	36	2	2
	4	2.569	266	+19	16	1	1
11547	4	3.764	252	+22	16	1	1
11548	4	3.764	235	+30	16	1	1
11549	4	3.764	230	−15	40	4	4
	4	4.647	234	−15	16	1	1
	4	5.565	234	−16	12	2	2
11551	4	4.647	232	+33	109	3	3
	4	5.565	232	+32	241	16	7
	4	6.591	231	+34	532	39	8
	4	7.590	232	+33	565	36	14
	4	8.608	230	+33	678	16	9
	4	9.572	227	+34	513	12	5
	4	10.587	229	+34	396	3	3
	4	12.579	223	+34	157	6	3
	4	13.571	213	+36	218	2	2
11552	4	5.565	211	+17	12	1	1
	4	6.591	208	+19	12	2	2
	4	7.590	211	+18	6	1	1
11553	4	5.565	193	+24	113	2	2
	4	6.591	191	+25	205	11	5
	4	7.590	191	+24	323	41	8
	4	8.608	191	+23	799	12	8
	4	9.572	190	+24	800	12	7
	4	10.587	191	+23	982	13	8
	4	12.579	190	+24	751	8	4
	4	13.571	190	+25	517	2	2
	4	14.615	193	+24	485	1	1
	4	15.674	194	+23	388	1	1
	4	16.558	197	+26	485	1	1
11554	4	6.591	316	−15	12	2	2
11555	4	6.591	165	+17	145	1	1
	4	7.590	169	+17	61	3	1
	4	8.608	171	+16	36	1	1
	4	9.572	170	+16	61	1	1
	4	10.587	172	+16	48	1	1
11556	4	7.590	153	−21	242	1	1
	4	8.608	154	−22	339	1	1
	4	9.572	154	−22	388	1	1
	4	10.587	155	−22	388	1	1
	4	12.579	154	−21	339	1	1
	4	13.571	153	−22	315	1	1
	4	14.615	153	−22	267	1	1
	4	15.674	150	−23	206	4	3
	4	16.558	153	−20	242	1	1
	4	17.549	155	−19	339	1	1
	4	18.796	151	−21	315	1	1
	4	19.562	151	−19	315	1	1
	4	20.603	154	−19	339	1	1
11558	4	8.608	153	+20	194	1	1
	4	9.572	152	+20	242	1	1
	4	10.587	154	+19	194	1	1
	4	12.579	150	+21	194	1	1
	4	13.571	151	+20	145	1	1
	4	14.615	150	+20	145	1	1
	4	15.674	149	+20	97	1	1
	4	16.558	151	+22	97	1	1
	4	17.549	152	+23	73	1	1
	4	18.796	151	+21	97	1	1
	4	19.562	151	+23	73	1	1
11560	4	9.572	158	+22	48	1	1
	4	10.587	160	+22	24	1	1
11561	4	9.572	134	−20	242	1	1
	4	10.587	136	−18	97	1	1
	4	12.579	133	−20	84	4	3
	4	13.571	134	−21	286	13	5
	4	14.615	134	−21	780	22	7
	4	15.674	133	−21	671	38	11
	4	16.558	134	−19	868	21	8
	4	17.549	133	−19	963	13	9
	4	18.796	132	−21	694	6	5
	4	19.562	131	−20	590	6	3
	4	20.603	133	−20	630	2	2

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L (°)	φ (°)	A	s	p
	4 21.603	132	−19	485	2	2
11562	4 10.587	124	−33	1455	3	3
	4 12.579	121	−32	679	6	3
	4 13.571	120	−33	654	7	5
	4 14.615	121	−33	545	9	6
	4 15.674	119	−34	457	31	8
	4 16.558	120	−31	497	12	5
	4 17.549	121	−30	326	8	5
	4 18.796	120	−31	194	2	2
	4 19.562	121	−30	133	6	2
	4 20.603	119	−32	97	2	1
	4 21.603	119	−32	97	1	1
	4 22.666	120	−32	36	1	1
11563	4 10.587	135	+13	194	1	1
	4 12.579	132	+13	404	6	3
	4 13.571	131	+13	412	7	4
	4 14.615	130	+14	351	7	4
	4 15.674	130	+14	207	17	8
	4 16.558	131	+16	246	11	5
	4 17.549	135	+14	145	1	1
	4 18.796	132	+14	129	2	2
	4 19.562	132	+15	85	2	2
	4 20.603	133	+13	97	1	1
	4 21.603	135	+13	97	1	1
11564	4 10.587	224	−19	93	3	2
	4 12.579	222	−20	16	1	1
11565	4 12.579	153	+32	16	1	1
	4 13.571	153	+32	16	1	1
	4 15.674	154	+33	18	3	3
	4 16.558	157	+34	136	8	7
	4 17.549	157	+35	411	10	5
	4 18.796	154	+33	314	3	3
	4 19.562	153	+33	315	3	3
11566	4 13.571	119	+15	16	1	1
	4 15.674	119	+15	42	11	3
	4 16.558	119	+19	42	3	2
	4 17.549	124	+18	126	9	6
	4 19.562	118	+18	24	4	3
11567	4 12.579	108	+18	315	4	3
	4 13.571	110	+17	202	4	3
	4 14.615	110	+18	243	3	3
	4 15.674	109	+21	163	15	5
	4 16.558	111	+22	149	8	4
	4 17.549	112	+21	48	3	1
	4 19.562	109	+20	12	1	1
11568	4 15.674	108	−36	6	1	1
	4 16.558	109	−34	16	2	1
	4 17.549	109	−33	12	2	2
11569	4 12.579	102	−36	194	1	1
	4 13.571	100	−36	121	1	1
	4 14.615	98	−37	97	1	1
	4 15.674	97	−38	32	1	1
	4 16.558	99	−36	12	2	2
11570	4 12.579	94	−24	97	1	1
	4 13.571	94	−24	121	1	1
	4 14.615	96	−25	97	1	1
	4 15.674	97	−25	32	2	1
	4 16.558	99	−23	24	1	1
	4 17.549	100	−23	36	3	3
11571	4 16.558	52	+32	16	1	1
	4 17.549	53	+32	48	1	1
11572	4 16.558	36	+25	48	1	1
	4 17.549	44	+25	145	3	2
	4 18.796	48	+25	339	2	2
	4 19.562	43	+24	254	5	3
	4 20.603	44	+25	306	8	5
	4 21.603	44	+26	564	16	6
	4 22.666	45	+25	994	9	5
	4 23.642	42	+26	715	13	6
	4 25.546	43	+26	477	7	5
	4 26.625	43	+26	557	3	3
	4 27.597	42	+26	630	4	4
	4 28.631	42	+25	97	1	1
11573	4 17.549	45	+13	61	2	1
	4 18.796	46	+13	133	3	1
	4 19.562	46	+12	61	3	1
	4 20.603	48	+12	73	1	1
	4 21.603	49	+12	61	2	1
	4 22.666	49	+13	61	1	1
	4 23.642	49	+13	16	1	1
11574	4 17.549	39	+35	218	1	1
	4 18.796	40	+36	218	2	2
	4 19.562	37	+34	84	3	3
	4 20.603	39	+34	137	5	4
	4 21.603	40	+33	444	16	7
	4 22.666	41	+33	483	18	7
	4 23.642	40	+33	272	15	7
	4 25.546	46	+33	24	1	1
11575	4 17.549	136	+37	96	5	2
	4 18.796	135	+35	322	4	3
	4 19.562	134	+36	218	2	2
	4 20.603	133	+37	230	2	2
	4 21.603	140	+36	194	1	1
11577	4 18.796	123	+36	32	1	1
11578	4 18.796	66	−14	73	1	1
	4 19.562	67	−15	24	2	1
	4 20.603	65	−15	6	1	1
	4 21.603	63	−14	24	2	1
11579	4 20.603	143	−28	109	2	1
	4 21.603	139	−28	145	1	1
11580	4 19.562	9	−26	32	1	1
	4 20.603	9	−26	32	2	1
	4 21.603	9	−26	32	1	1
	4 22.666	11	−26	16	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
11581	4	19.562	357	+17	97	1	1
	4	20.603	1	+17	145	2	1
	4	21.603	2	+17	145	1	1
	4	22.666	5	+17	121	1	1
	4	23.642	4	+16	222	4	3
	4	25.546	5	+16	109	8	4
	4	26.625	5	+17	210	7	4
	4	27.597	6	+18	278	6	4
	4	28.631	8	+16	194	4	1
	4	29.589	9	+17	218	1	1
	4	30.527	7	+16	170	4	2
11582	4	20.603	122	−22	24	1	1
	4	21.603	120	−22	48	1	1
	4	22.666	116	−23	48	1	1
11584	4	20.603	12	−24	38	2	2
	4	21.603	13	−24	61	2	1
	4	22.666	15	−23	12	2	1
11585	4	20.603	356	−20	24	1	1
	4	21.603	356	−19	16	1	1
	4	22.666	355	−19	44	4	3
	4	23.642	358	−19	16	1	1
11586	4	21.603	114	−25	36	1	1
	4	22.666	111	−25	145	1	1
11588	4	21.603	30	−27	56	3	2
	4	22.666	33	−27	36	3	2
	4	23.642	30	−28	36	2	2
	4	26.625	30	−28	40	2	2
11589	4	22.666	51	−20	24	2	2
11590	4	22.666	322	+23	582	1	1
	4	23.642	325	+23	291	1	1
	4	25.546	322	+24	221	5	4
	4	26.625	320	+23	379	8	6
	4	27.597	319	+25	330	5	5
	4	28.631	325	+25	121	1	1
	4	29.589	325	+25	121	1	1
	4	30.527	323	+25	73	1	1
	5	1.566	323	+25	61	1	1
	5	2.706	322	+23	32	2	1
11591	4	23.642	83	+25	16	1	1
11593	4	25.546	312	−27	60	4	4
11594	4	25.546	63	+22	6	1	1
11595	4	25.546	347	+15	16	1	1
11596	4	26.625	321	−15	104	6	4
	4	27.597	321	−14	193	4	3
	4	28.631	322	−14	108	4	3
	4	29.589	323	−14	72	4	4
	4	30.527	324	−14	182	14	4
	5	1.566	324	−14	424	7	4
	5	2.706	323	−15	339	10	5
	5	3.672	325	−14	197	6	3
11597	4	27.597	43	−25	52	3	2
11600	4	30.527	225	−20	460	9	4
	5	1.566	223	−22	379	4	4
	5	2.706	223	−21	214	6	3
	5	3.672	226	−22	210	8	2
	5	4.659	229	−19	218	1	1
	5	5.535	227	−20	218	1	1
	5	6.593	227	−19	218	1	1
	5	7.515	228	−18	194	2	1
	5	8.516	227	−17	218	3	2
	5	9.506	225	−16	206	2	2
	5	10.710	227	−18	145	1	1
	5	11.562	227	−19	145	1	1
11601	4	30.527	268	−17	40	4	2
	5	1.566	266	−17	275	5	4
	5	2.706	266	−17	254	20	6
	5	3.672	267	−16	238	24	6
	5	4.659	269	−15	209	5	4
	5	5.535	265	−17	85	2	1
11602	5	1.566	220	+23	84	3	2
	5	2.706	221	+24	93	3	2
	5	3.672	221	+23	48	5	2
	5	4.659	224	+25	32	1	1
	5	5.535	224	+25	36	1	1
11603	4	30.527	217	+17	727	1	1
	5	1.566	212	+15	1503	5	3
	5	2.706	213	+16	1061	25	8
	5	3.672	216	+15	1256	39	13
	5	4.659	217	+18	1179	16	8
	5	5.535	216	+17	1243	18	10
	5	6.593	216	+16	1406	7	4
	5	7.515	215	+18	1259	26	10
	5	8.516	215	+18	1263	24	8
	5	9.506	214	+19	958	27	8
	5	10.710	218	+16	630	3	3
	5	11.562	215	+14	476	10	4
11604	5	2.706	198	+18	279	2	2
	5	3.672	198	+16	170	4	3
	5	4.659	195	+19	314	4	4
	5	5.535	199	+17	194	2	2
	5	6.593	200	+18	279	2	2
	5	7.515	199	+17	137	3	3
	5	8.516	200	+19	97	3	2
	5	9.506	200	+19	79	5	2
	5	10.710	204	+17	48	1	1
	5	11.562	202	+16	16	1	1
11605	5	2.706	189	+17	48	1	1
	5	3.672	190	+16	64	7	4
	5	4.659	186	+19	40	2	2
	5	5.535	191	+17	113	3	3
	5	6.593	190	+17	363	4	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	5 7.515	190	+18	193	12	3
	5 8.516	189	+20	217	11	4
	5 9.506	189	+19	354	28	6
	5 10.710	190	+19	847	11	5
	5 11.562	189	+18	756	28	6
	5 12.863	191	+18	823	13	7
	5 13.601	191	+21	606	5	4
	5 14.512	188	+23	400	5	3
11606	5 2.706	183	+24	339	1	1
	5 3.672	184	+24	267	1	1
	5 4.659	184	+26	388	1	1
	5 5.535	183	+24	364	1	1
	5 6.593	182	+24	388	1	1
	5 7.515	183	+26	321	2	2
	5 8.516	182	+26	291	2	1
	5 9.506	180	+27	297	3	2
	5 10.710	183	+25	315	1	1
	5 11.562	181	+24	242	1	1
	5 12.863	181	+24	291	1	1
	5 13.601	180	+26	436	1	1
	5 14.512	178	+26	315	1	1
	5 15.510	184	+26	291	1	1
11607	5 3.672	316	+23	56	4	3
11608	5 3.672	272	−28	24	3	2
	5 4.659	274	−26	133	3	3
	5 5.535	273	−26	364	4	4
	5 6.593	273	−26	460	2	2
	5 7.515	272	−25	388	4	2
11609	5 3.672	250	−12	52	4	3
	5 4.659	250	−10	96	4	3
11612	5 5.535	145	−21	145	1	1
	5 6.593	147	−21	242	1	1
	5 7.515	148	−21	182	1	1
	5 8.516	147	−20	194	1	1
	5 9.506	147	−20	145	1	1
	5 10.710	147	−19	145	1	1
	5 11.562	147	−19	158	2	1
	5 12.863	147	−19	133	1	1
	5 13.601	147	−19	145	1	1
	5 14.512	147	−18	97	1	1
	5 15.510	146	−17	109	1	1
	5 16.558	146	−16	97	1	1
	5 17.510	146	−16	109	1	1
11613	5 6.593	137	−23	485	1	1
	5 7.515	133	−23	194	3	2
	5 8.516	134	−23	218	4	2
	5 9.506	134	−23	181	3	2
	5 10.710	138	−21	133	1	1
	5 11.562	137	−21	109	1	1
	5 12.863	136	−21	145	1	1
	5 13.601	138	−21	109	1	1
	5 14.512	138	−20	109	1	1
	5 15.510	138	−20	97	1	1
	5 16.558	138	−18	97	1	1
	5 17.510	138	−17	97	1	1
	5 18.508	138	−14	97	1	1
11614	5 7.515	130	−33	194	3	1
	5 8.516	132	−32	145	1	1
	5 9.506	131	−32	61	2	1
	5 10.710	132	−31	48	1	1
11615	5 7.515	175	+15	28	2	2
	5 8.516	175	+15	16	1	1
	5 9.506	174	+15	16	3	1
11616	5 7.515	174	−28	64	2	2
	5 8.516	174	−28	96	4	4
	5 9.506	177	−27	18	2	2
11618	5 9.506	120	+16	36	1	1
	5 10.710	123	+18	48	1	1
	5 11.562	123	+17	36	2	2
	5 12.863	123	+17	16	1	1
	5 13.601	123	+17	16	1	1
11619	5 8.516	108	−29	546	4	3
	5 9.506	109	−29	266	7	4
	5 10.710	107	−29	96	2	2
	5 11.562	108	−27	44	5	3
11620	5 9.506	156	−15	128	8	3
	5 10.710	158	−14	364	2	2
	5 11.562	156	−15	436	9	4
	5 12.863	156	−16	582	9	4
	5 13.601	156	−15	642	12	6
	5 14.512	155	−15	407	16	6
	5 15.510	156	−14	434	8	4
	5 16.558	156	−12	254	6	4
	5 17.510	154	−11	145	1	1
11621	5 11.562	109	+30	436	14	4
	5 12.863	109	+31	1284	19	5
	5 13.601	107	+30	1260	15	8
	5 14.512	105	+29	965	27	8
	5 15.510	104	+30	993	25	10
	5 16.558	105	+32	957	30	10
	5 17.510	104	+32	1261	19	12
	5 18.508	103	+34	847	18	9
	5 19.555	104	+32	726	7	5
	5 20.612	105	+32	412	3	3
11622	5 10.710	91	−21	388	1	1
	5 11.562	90	−20	343	4	3
	5 12.863	90	−20	388	1	1
	5 13.601	90	−22	388	1	1
	5 14.512	91	−22	388	1	1
	5 15.510	92	−21	339	2	1
	5 16.558	91	−19	388	1	1
	5 17.510	92	−19	388	1	1
	5 18.508	92	−18	388	1	1
	5 19.555	92	−19	461	1	1
	5 20.612	92	−19	485	1	1
	5 21.519	92	−19	339	1	1
	5 22.507	91	−19	145	1	1
11623	5 11.562	209	+23	44	6	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
11624	5 13.601	117	+17	48	2	2
	5 17.510	121	+24	60	3	3
	5 18.508	119	+26	117	4	3
	5 19.555	120	+24	97	1	1
11625	5 14.512	106	−30	12	2	1
	5 15.510	106	−32	64	3	2
	5 16.558	104	−29	12	3	1
11626	5 15.510	32	+26	12	1	1
	5 16.558	29	+26	40	5	2
	5 17.510	36	+25	60	2	2
	5 18.508	29	+24	76	10	3
	5 19.555	30	+26	230	6	5
	5 20.612	30	+26	485	9	6
	5 21.519	31	+27	525	17	9
	5 22.507	28	+28	367	10	6
	5 23.567	33	+26	291	2	1
	5 24.531	35	+26	291	1	1
	5 25.510	35	+26	291	1	1
11627	5 16.558	9	−24	158	5	2
	5 17.510	8	−24	472	6	5
	5 18.508	9	−26	415	14	7
	5 19.555	9	−24	460	7	5
	5 20.612	8	−24	788	8	6
	5 21.519	9	−25	641	17	7
	5 22.507	6	−24	589	23	9
	5 23.567	8	−23	453	11	5
	5 24.531	7	−23	377	12	5
	5 25.510	7	−24	298	6	3
	5 26.694	11	−25	291	1	1
	5 27.576	9	−26	242	1	1
	5 28.524	10	−23	194	1	1
11628	5 17.510	94	+26	40	3	3
	5 18.508	95	+28	24	1	1
	5 19.555	91	+25	80	7	4
	5 20.612	100	+26	97	2	1
	5 21.519	93	+26	339	2	1
11629	5 18.508	89	−25	40	5	3
	5 19.555	92	−27	182	5	3
	5 20.612	90	−27	266	2	2
	5 21.519	96	−26	145	1	1
11630	5 18.508	114	−21	48	4	3
	5 19.555	115	−24	97	1	1
11631	5 17.510	36	+31	12	1	1
	5 18.508	44	+31	16	2	1
11632	5 18.508	339	−22	121	1	1
	5 19.555	340	−20	97	1	1
	5 20.612	336	−21	157	4	2
	5 21.519	341	−19	32	1	1
	5 22.507	340	−18	16	1	1
	5 23.567	340	−18	12	1	1
11633	5 20.612	331	−15	24	1	1
	5 21.519	333	−16	36	2	1
	5 22.507	330	−16	48	1	1
11634	5 20.612	90	+26	121	4	2
	5 21.519	88	+27	291	1	1
	5 22.507	86	+28	242	1	1
11635	5 21.519	56	+37	24	1	1
	5 23.567	51	+39	113	3	2
	5 24.531	48	+41	32	1	1
11636	5 21.519	334	−24	73	2	1
	5 22.507	331	−22	202	6	4
	5 23.567	334	−22	464	9	6
	5 24.531	334	−20	1053	26	8
	5 25.510	333	−20	1640	25	14
	5 26.694	333	−21	1455	11	8
	5 27.576	332	−21	1171	33	11
	5 28.524	333	−20	1287	28	12
	5 29.512	333	−20	1382	12	7
	5 30.624	339	−17	485	1	1
11638	5 24.531	313	−24	80	3	2
	5 25.510	314	−22	76	5	3
	5 26.694	313	−23	242	5	4
	5 27.576	312	−22	104	18	5
	5 28.524	314	−22	70	5	4
	5 29.512	315	−22	112	5	4
	5 30.624	326	−21	667	7	5
	5 31.506	327	−18	32	1	1
11639	5 24.531	269	−26	32	1	1
11640	5 24.531	260	−17	48	1	1
	5 25.510	258	−16	24	1	1
	5 26.694	258	−16	61	1	1
	5 27.576	258	−16	28	3	2
	5 28.524	258	−17	84	12	4
	5 29.512	257	−17	133	7	2
	5 30.624	258	−16	48	2	2
	5 31.506	258	−17	96	8	3
	6 1.508	258	−16	80	7	2
	6 2.667	258	−16	52	6	2
11641	5 25.510	239	−17	339	1	1
	5 26.694	240	−15	679	1	1
	5 27.576	231	−16	1025	12	6
	5 28.524	236	−17	811	12	7
	5 29.512	237	−16	807	15	6
	5 30.624	236	−17	759	6	4
	5 31.506	236	−17	702	22	8
	6 1.508	237	−15	612	23	8
	6 2.667	234	−16	474	28	7
	6 3.606	237	−15	589	4	4
	6 4.510	236	−16	394	7	5
	6 5.518	242	−13	581	6	2
	6 6.521	245	−13	509	3	2
11642	5 27.576	240	+33	64	5	2
	5 28.524	239	+30	125	5	3
	5 29.512	242	+30	72	3	2
	5 30.624	235	+31	36	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
11643	5	27.576	212	+16	291	1	1
	5	28.524	214	+15	242	2	1
	5	29.512	215	+15	242	1	1
	5	30.624	215	+16	291	3	1
	5	31.506	215	+16	194	2	1
	6	1.508	215	+16	176	2	2
	6	2.667	215	+18	176	3	2
	6	3.606	214	+16	194	1	1
	6	4.510	214	+16	145	3	1
	6	5.518	214	+17	97	1	1
	6	6.521	214	+18	73	2	1
	6	7.509	213	+18	48	1	1
	6	8.510	212	+16	48	1	1
11644	5	28.524	212	+23	73	3	1
	5	29.512	212	+22	387	2	2
	5	30.624	212	+23	315	2	2
	5	31.506	213	+23	230	3	2
	6	1.508	212	+23	242	5	2
	6	2.667	213	+25	408	25	5
11645	5	28.524	203	+22	969	2	2
	5	29.512	202	+21	1260	5	3
	5	30.624	205	+23	822	10	5
	5	31.506	205	+22	993	23	10
	6	1.508	205	+22	609	30	9
	6	2.667	205	+24	558	36	9
	6	3.606	207	+22	1162	14	8
	6	4.510	207	+23	1029	33	9
	6	5.518	207	+23	1025	18	8
	6	6.521	209	+25	970	16	6
	6	7.509	208	+24	961	10	5
	6	8.510	210	+24	1164	8	2
	6	9.580	207	+23	485	1	1
11646	5	30.624	310	+24	36	3	2
11647	5	30.624	197	−13	32	2	1
	5	31.506	196	−14	12	1	1
11648	5	31.506	171	+24	242	1	1
	6	1.508	170	+24	194	1	1
	6	2.667	171	+25	145	1	1
	6	3.606	170	+24	242	1	1
	6	4.510	168	+24	170	1	1
	6	5.518	168	+24	194	1	1
	6	6.521	168	+25	194	1	1
	6	7.509	168	+25	182	1	1
	6	8.510	167	+24	170	1	1
	6	9.580	168	+24	170	1	1
	6	10.721	168	+25	170	1	1
	6	11.524	169	+26	97	1	1
	6	12.518	166	+27	121	1	1
11650	6	2.667	264	+23	24	4	3
11651	6	2.667	146	−16	109	2	2
	6	3.606	150	−17	48	1	1
	6	4.510	146	−17	111	10	4
	6	5.518	146	−17	177	14	5
	6	6.521	147	−17	96	5	4
	6	7.509	145	−15	12	1	1
	6	10.721	143	−14	12	1	1

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
11652	6	4.510	119	+18	73	1	1
	6	5.518	121	+18	24	2	1
	6	6.521	121	+19	32	1	1
	6	7.509	121	+20	24	1	1
	6	10.721	115	+23	36	1	1
11653	6	5.518	174	−20	56	4	3
	6	6.521	174	−18	167	12	7
	6	7.509	174	−18	242	20	8
	6	8.510	174	−18	129	8	3
	6	9.580	177	−20	73	1	1
	6	10.721	177	−18	48	1	1
	6	11.524	177	−14	48	1	1
11654	6	7.509	144	−25	6	2	1
	6	10.721	142	−25	24	1	1
	6	12.518	142	−22	24	8	3
	6	13.511	142	−21	24	2	1
11655	6	6.521	88	−31	242	1	1
	6	7.509	84	−33	419	6	4
	6	8.510	84	−30	498	13	7
	6	9.580	81	−30	509	8	4
	6	10.721	84	−28	351	5	3
	6	11.524	83	−29	145	5	3
	6	12.518	83	−29	151	11	5
	6	13.511	83	−27	96	13	3
	6	14.510	84	−26	73	5	1
	6	15.503	85	−26	48	5	1
11657	6	10.721	45	+16	97	1	1
	6	11.524	48	+13	42	4	3
	6	12.518	45	+14	24	1	1
	6	13.511	52	+13	61	4	1
	6	14.510	50	+14	36	2	2
	6	17.623	49	+14	6	2	1
	6	18.569	50	+14	24	4	3
11658	6	10.721	48	+28	32	1	1
	6	11.524	43	+28	72	2	2
	6	12.518	45	+27	42	2	2
	6	13.511	44	+27	48	3	2
	6	14.510	46	+27	24	1	1
	6	15.503	46	+27	16	1	1
11659	6	10.721	34	+23	242	2	1
	6	11.524	33	+21	145	2	1
	6	12.518	25	+21	331	8	5
	6	13.511	25	+22	315	5	3
	6	14.510	26	+22	290	13	4
	6	15.503	27	+22	137	10	4
	6	16.753	34	+22	121	5	2
	6	17.623	31	+22	140	9	6
	6	18.569	29	+22	129	24	6
	6	19.518	32	+24	72	4	2
	6	20.569	34	+24	28	3	2
11660	6	11.524	26	+23	484	2	2
	6	12.518	28	+24	121	1	1
	6	13.511	28	+24	97	1	1
	6	14.510	28	+24	109	1	1
	6	15.503	27	+24	97	1	1
	6	16.753	28	+24	48	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L °	φ °	A	s	p
	6	17.623	27	+25	73	1	1
	6	18.569	27	+24	61	1	1
	6	19.518	26	+25	48	1	1
	6	20.569	28	+26	36	3	1
	6	21.849	30	+26	73	1	1
	6	22.511	31	+29	73	1	1
11661	6	13.511	26	−27	34	3	3
	6	14.510	29	−26	24	1	1
	6	15.503	28	−27	24	2	2
11662	6	13.511	5	−27	291	1	1
	6	14.510	2	−27	194	1	1
	6	15.503	4	−27	176	2	2
	6	16.753	2	−25	145	1	1
	6	17.623	3	−27	145	1	1
	6	18.569	3	−25	97	1	1
	6	19.518	3	−25	121	1	1
	6	20.569	2	−25	121	1	1
	6	21.849	0	−27	121	1	1
	6	22.511	1	−25	97	1	1
	6	23.632	359	−25	97	1	1
	6	24.557	2	−26	97	1	1
11663	6	13.511	34	+34	12	1	1
	6	16.753	34	+32	16	1	1
	6	17.623	33	+33	12	1	1
11664	6	13.511	355	+19	73	1	1
	6	14.510	352	+19	278	5	4
	6	15.503	352	+18	569	11	5
	6	16.753	354	+20	921	7	2
	6	17.623	353	+20	953	12	3
	6	18.569	353	+21	901	31	7
	6	19.518	351	+20	869	12	6
	6	20.569	351	+22	728	23	9
	6	21.849	352	+19	629	6	4
	6	22.511	351	+21	485	9	4
	6	23.632	351	+21	473	7	4
	6	24.557	352	+20	343	10	5
	6	25.560	352	+23	424	3	3
11665	6	14.510	24	+30	72	4	2
	6	15.503	24	+30	291	6	2
	6	16.753	25	+30	508	9	3
	6	17.623	26	+32	325	12	5
	6	18.569	25	+31	225	21	7
	6	19.518	24	+33	401	11	4
	6	20.569	26	+34	234	16	4
	6	21.849	25	+30	169	2	2
11666	6	14.510	342	−20	24	1	1
	6	15.503	347	−19	48	1	1
	6	16.753	347	−17	32	2	1
	6	17.623	349	−19	18	2	2
	6	18.569	349	−17	127	10	3
	6	19.518	349	−17	125	5	3
	6	20.569	349	−16	40	6	3
	6	21.849	348	−20	32	1	1
	6	22.511	349	−17	12	1	1
	6	23.632	356	−16	170	1	1
	6	24.557	351	−20	70	7	3
	6	25.560	351	−16	97	1	1
11667	6	14.510	337	−19	291	1	1
	6	15.503	333	−21	533	2	2
	6	16.753	330	−20	630	6	4
	6	17.623	331	−22	545	15	6
	6	18.569	333	−19	512	47	9
	6	19.518	333	−21	750	25	11
	6	20.569	333	−19	683	58	13
	6	21.849	331	−20	636	14	8
	6	22.511	331	−20	516	34	9
	6	23.632	331	−20	520	11	6
	6	24.557	330	−21	234	17	3
	6	25.560	330	−19	254	3	3
	6	26.506	325	−20	73	1	1
11668	6	17.623	77	−23	12	2	2
11669	6	17.623	354	+12	24	4	1
11670	6	19.518	31	+33	282	11	4
	6	20.569	34	+32	798	31	6
	6	21.849	31	+27	970	9	3
	6	22.511	30	+33	1479	6	4
	6	23.632	23	+32	388	1	1
11671	6	20.569	282	+33	24	2	2
11673	6	20.569	346	+14	24	6	3
	6	21.849	346	+11	485	7	5
	6	22.511	344	+13	861	17	4
	6	23.632	344	+13	1296	22	5
	6	24.557	346	+13	1308	45	5
	6	25.560	346	+15	1649	7	3
	6	26.506	343	+17	970	2	2
11674	6	21.849	305	−17	48	2	2
	6	22.511	307	−18	16	1	1
11676	6	22.511	240	−16	291	1	1
	6	23.632	240	−16	267	1	1
	6	24.557	242	−14	145	1	1
	6	25.560	241	−16	194	1	1
	6	26.506	240	−16	194	2	1
	6	27.508	241	−15	170	1	1
	6	28.510	241	−15	145	2	1
	6	29.511	241	−15	133	1	1
	6	30.524	240	−15	133	2	1
	7	1.592	240	−14	133	1	1
	7	2.527	240	−14	97	1	1
	7	3.510	240	−14	121	1	1
11677	6	23.632	240	−24	16	1	1
11678	6	23.632	227	−32	339	1	1
	6	24.557	229	−31	194	1	1
	6	25.560	230	−34	218	1	1
	6	26.506	229	−34	170	1	1
	6	27.508	230	−33	145	1	1
	6	28.510	230	−33	121	1	1
	6	29.511	229	−33	121	1	1
	6	30.524	226	−32	145	1	1
	7	1.592	226	−31	145	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
	7	2.527	226	−31	121	1	1
	7	3.510	226	−30	133	1	1
	7	4.638	226	−31	145	1	1
11679	6	24.557	263	+22	12	2	1
11680	6	24.557	223	−30	140	15	5
	6	25.560	221	−32	160	5	4
	6	26.506	223	−32	157	9	4
	6	27.508	225	−31	387	8	3
	6	28.510	225	−31	369	16	6
	6	29.511	225	−30	211	23	6
	6	30.524	224	−30	96	7	3
	7	1.592	222	−28	48	1	1
	7	2.527	224	−29	12	3	1
11681	6	24.557	214	+25	32	1	1
11682	6	25.560	306	+22	97	2	2
	6	26.506	306	+23	16	1	1
11683	6	26.506	265	+17	12	1	1
	6	27.508	265	+19	24	2	2
	6	28.510	266	+18	12	3	2
11684	6	28.510	193	+30	169	5	3
	6	29.511	193	+31	606	15	5
	6	30.524	192	+30	557	8	3
	7	1.592	190	+31	291	4	2
	7	2.527	192	+30	532	19	8
	7	3.510	191	+32	468	15	5
	7	4.638	193	+32	424	7	4
	7	5.776	193	+29	355	5	5
	7	6.773	195	+28	266	3	3
	7	7.586	196	+30	170	1	1
11685	6	28.510	183	+18	161	4	4
	6	29.511	183	+18	266	20	4
	6	30.524	182	+19	291	7	5
	7	1.592	183	+20	267	3	2
	7	2.527	182	+20	157	5	3
	7	3.510	187	+20	73	2	1
	7	4.638	190	+20	73	1	1
	7	5.776	188	+20	32	1	1
	7	6.773	188	+19	16	2	1
11687	6	28.510	287	−23	18	2	2
11688	6	28.510	188	−30	24	1	1
	6	29.511	191	−29	28	3	2
	6	30.524	194	−28	16	1	1
11689	6	29.511	168	−23	28	2	2
11690	6	28.510	157	+26	388	1	1
	6	29.511	154	+26	298	6	4
	6	30.524	153	+26	314	8	3
	7	1.592	152	+27	485	4	4
	7	2.527	151	+27	387	10	4
	7	3.510	151	+28	286	11	4
	7	4.638	158	+27	266	3	2
	7	5.776	155	+28	347	7	4
	7	6.773	154	+27	371	5	3
	7	7.586	153	+28	391	5	4
	7	8.742	157	+26	436	7	4
	7	9.670	156	+26	290	3	3
	7	10.574	158	+29	339	2	2
11691	6	29.511	154	−20	48	1	1
	6	30.524	150	−20	226	9	3
	7	1.592	151	−19	302	3	3
	7	2.527	150	−19	169	5	3
	7	3.510	151	−20	198	7	3
	7	4.638	151	−20	194	2	2
	7	5.776	150	−19	137	2	2
	7	6.773	153	−18	121	1	1
	7	7.586	154	−15	145	1	1
	7	8.742	155	−16	133	1	1
	7	9.670	156	−16	97	2	1
	7	10.574	157	−15	97	1	1
11692	6	29.511	212	+23	12	1	1
	6	30.524	211	+24	24	4	2
	7	1.592	210	+25	73	3	1
	7	2.527	210	+26	6	1	1
11693	6	29.511	208	+18	6	1	1
	7	1.592	200	+24	48	2	1
11694	6	29.511	144	−26	242	1	1
	6	30.524	139	−28	654	4	3
	7	1.592	134	−27	775	2	2
	7	2.527	139	−27	682	14	6
	7	3.510	140	−28	481	18	7
	7	4.638	136	−28	497	4	4
	7	5.776	137	−27	484	11	7
	7	6.773	133	−28	440	12	7
	7	7.586	137	−26	331	6	5
	7	8.742	135	−26	242	4	4
	7	9.670	140	−26	149	5	4
	7	10.574	134	−25	181	3	3
	7	11.507	138	−24	145	3	2
11695	7	1.592	196	+29	291	3	1
	7	2.527	201	+24	121	7	3
	7	3.510	202	+25	210	9	4
	7	4.638	201	+25	182	4	3
	7	5.776	198	+25	24	2	1
11696	7	3.510	93	+17	121	2	2
	7	4.638	94	+17	137	2	2
	7	5.776	96	+19	97	1	1
	7	6.773	94	+19	73	1	1
	7	7.586	94	+19	97	1	1
	7	8.742	95	+20	73	2	1
	7	9.670	94	+19	48	1	1
	7	10.574	94	+20	36	1	1
	7	11.507	95	+20	16	1	1
	7	12.512	91	+20	12	1	1
11697	7	3.510	101	−27	32	2	1
	7	6.773	98	−26	28	2	2
	7	7.586	101	−26	48	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.		Date	*L* °	*φ* °	*A*	*s*	*p*
11698	7	5.776	115	+24	60	3	2
	7	6.773	115	+23	145	2	2
	7	7.586	115	+24	153	2	2
	7	8.742	115	+23	141	6	2
	7	9.670	114	+23	109	6	3
	7	10.574	115	+24	76	4	3
	7	11.507	116	+24	36	2	2
	7	12.512	116	+24	12	1	1
11699	7	4.638	81	−23	436	1	1
	7	5.776	80	−21	364	1	1
	7	6.773	74	−22	380	3	2
	7	7.586	80	−22	339	1	1
	7	8.742	79	−20	315	1	1
	7	9.670	78	−21	279	2	1
	7	10.574	80	−21	364	2	1
	7	11.507	81	−22	327	3	2
	7	12.512	79	−22	254	3	2
	7	13.537	79	−22	182	5	2
	7	14.526	80	−22	145	2	2
	7	15.592	81	−21	121	1	1
	7	16.517	83	−21	194	1	1
11700	7	5.776	89	+20	24	1	1
	7	6.773	88	+20	242	5	3
	7	7.586	87	+20	569	5	4
	7	8.742	88	+20	786	6	5
	7	9.670	87	+19	739	8	4
	7	10.574	86	+20	884	7	6
	7	11.507	88	+19	646	10	5
	7	12.512	85	+21	582	8	5
	7	13.537	86	+20	533	13	6
	7	14.526	88	+20	488	7	4
	7	15.592	88	+21	509	3	2
	7	16.517	86	+21	242	2	1
11701	7	6.773	54	+15	339	7	2
	7	7.586	53	+14	387	3	2
	7	8.742	53	+16	218	5	2
	7	9.670	54	+14	206	11	4
	7	10.574	54	+14	230	8	3
	7	11.507	54	+13	322	16	8
	7	12.512	52	+14	685	18	11
	7	13.537	55	+14	601	13	8
	7	14.526	54	+14	445	10	7
	7	15.592	55	+15	468	4	3
	7	16.517	54	+16	339	4	2
	7	17.508	54	+16	303	2	2
	7	18.506	52	+16	242	1	1
11702	7	7.586	37	+16	388	1	1
	7	8.742	28	+21	376	7	4
	7	9.670	30	+19	387	5	3
	7	10.574	30	+18	383	7	4
	7	11.507	33	+17	428	14	8
	7	12.512	29	+19	683	23	11
	7	13.537	30	+19	439	20	10
	7	14.526	30	+19	269	19	8
	7	15.592	29	+19	197	10	8
	7	16.517	29	+20	94	7	5
	7	17.508	36	+19	28	3	3
	7	18.506	35	+18	24	1	1
	7	19.508	38	+18	32	1	1
11703	7	8.742	19	+34	194	2	1

No.		Date	*L* °	*φ* °	*A*	*s*	*p*
	7	9.670	15	+32	218	2	2
	7	10.574	17	+31	242	2	2
	7	11.507	17	+31	359	9	7
	7	12.512	16	+32	238	11	6
	7	13.537	16	+33	157	7	5
	7	14.526	16	+31	116	9	5
	7	15.592	19	+33	62	3	3
	7	16.517	17	+33	24	3	3
	7	17.508	15	+34	36	6	4
	7	18.506	19	+34	6	1	1
11705	7	11.507	22	−24	16	1	1
11706	7	11.507	356	−15	24	1	1
11707	7	10.574	351	+14	194	1	1
	7	11.507	351	+12	484	7	3
	7	12.512	349	+13	287	6	4
	7	13.537	351	+14	194	7	3
	7	14.526	352	+15	205	4	4
	7	15.592	355	+15	61	2	1
	7	16.517	353	+16	64	5	2
	7	17.508	350	+16	28	3	3
11708	7	11.507	79	−26	28	4	2
	7	12.512	77	−27	72	3	2
	7	13.537	76	−28	105	7	3
	7	14.526	83	−26	73	2	1
	7	15.592	87	−26	48	1	1
11709	7	11.507	75	+26	93	4	3
	7	12.512	74	+26	85	3	2
	7	13.537	78	+26	61	1	1
	7	14.526	80	+25	36	1	1
	7	15.592	81	+25	24	1	1
11710	7	12.512	60	+30	60	4	2
	7	13.537	63	+29	12	1	1
11711	7	12.512	355	+20	12	1	1
	7	16.517	346	+27	12	1	1
11712	7	14.526	303	−17	242	1	1
	7	15.592	304	−17	291	1	1
	7	16.517	303	−16	218	1	1
	7	17.508	304	−17	218	1	1
	7	18.506	305	−17	218	1	1
	7	19.508	305	−16	218	1	1
	7	20.699	303	−15	182	1	1
	7	21.685	305	−16	206	1	1
	7	22.588	304	−15	170	1	1
	7	23.603	305	−15	194	1	1
	7	24.593	307	−15	133	1	1
	7	25.669	307	−16	242	1	1
	7	26.512	306	−15	242	1	1
11713	7	15.592	71	+17	36	2	2
	7	16.517	68	+17	84	4	2
	7	17.508	67	+17	170	2	2

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11714	7	16.517	331	+26	64	5	3
	7	17.508	332	+26	96	10	5
	7	18.506	331	+26	277	19	10
	7	19.508	329	+26	541	29	9
	7	20.699	329	+27	589	67	9
	7	21.685	330	+25	681	21	10
	7	22.588	330	+26	994	56	9
	7	23.603	327	+26	1745	15	7
	7	24.593	324	+26	581	4	4
	7	25.669	322	+27	145	1	1
11715	7	16.517	284	−23	145	1	1
	7	17.508	284	−23	163	3	3
	7	18.506	285	−23	97	1	1
	7	19.508	285	−23	121	1	1
	7	20.699	282	−22	85	2	1
	7	21.685	284	−23	48	1	1
	7	22.588	283	−22	16	2	1
11716	7	17.508	340	−23	24	2	2
	7	18.506	338	−22	12	1	1
11717	7	21.685	213	−23	1260	4	3
	7	22.588	211	−22	1356	16	6
	7	23.603	213	−25	1599	10	6
	7	24.593	215	−25	1604	19	10
	7	25.669	213	−25	1447	26	12
	7	26.512	214	−24	1378	25	11
	7	27.524	215	−24	1159	13	9
	7	28.776	213	−25	1285	5	4
	7	29.585	214	−23	1006	17	7
	7	30.508	213	−23	1032	10	5
	7	31.508	213	−22	1030	4	3
	8	1.772	214	−25	1309	2	2
	8	2.598	212	−24	145	1	1
11719	7	21.685	249	−13	22	2	2
	7	22.588	249	−13	58	8	5
	7	23.603	253	−13	40	2	2
	7	24.593	255	−13	24	2	1
	7	25.669	254	−13	12	1	1
11720	7	23.603	235	−15	16	1	1
11721	7	25.669	239	+26	242	6	4
	7	26.512	237	+26	392	7	5
	7	27.524	237	+26	387	7	5
	7	28.776	237	+25	388	3	3
	7	29.585	239	+27	169	10	2
	7	30.508	240	+26	145	1	1
	7	31.508	240	+26	145	1	1
11722	7	26.512	163	+25	376	4	4
	7	27.524	164	+26	107	7	5
	7	28.776	163	+26	145	2	2
	7	29.585	164	+27	76	20	4
	7	30.508	167	+25	32	1	1
	7	31.508	164	+26	40	2	2
	8	1.772	163	+25	213	11	6
	8	2.598	162	+25	252	9	8
	8	3.519	163	+25	109	8	4
	8	4.574	166	+25	97	4	1
	8	5.757	169	+23	97	1	1

No.	Date		L	φ	A	s	p
			°	°			
11723	7	26.512	150	−27	145	1	1
	7	27.524	148	−28	509	2	2
	7	28.776	144	−26	460	3	3
	7	29.585	146	−26	153	9	4
	7	30.508	146	−27	166	9	3
	7	31.508	145	−27	42	5	3
	8	2.598	153	−25	24	1	1
	8	3.519	153	−25	24	2	1
11724	7	27.524	249	+21	12	1	1
	7	28.776	247	+21	16	1	1
	7	29.585	247	+23	16	1	1
	7	30.508	244	+22	32	2	1
11725	7	27.524	143	−35	97	1	1
	7	28.776	140	−34	194	1	1
	7	29.585	138	−33	72	10	5
	7	30.508	139	−34	36	3	2
11726	7	27.524	128	−30	291	1	1
	7	28.776	131	−28	218	1	1
	7	29.585	126	−27	221	8	4
	7	30.508	134	−30	161	2	2
	7	31.508	134	−29	145	3	1
	8	1.772	131	−29	121	2	1
	8	2.598	130	−30	217	7	4
	8	3.519	127	−30	177	7	5
	8	4.574	126	−29	105	4	3
	8	5.757	130	−28	109	1	1
	8	6.615	132	−25	61	1	1
	8	7.551	132	−26	48	1	1
11727	7	29.585	142	−15	54	10	4
	7	30.508	141	−16	114	8	4
	7	31.508	143	−16	313	12	7
	8	1.772	142	−16	419	6	5
	8	2.598	142	−16	339	17	6
	8	3.519	143	−15	378	11	7
	8	4.574	143	−15	290	13	4
	8	5.757	144	−16	427	8	4
	8	6.615	154	−13	170	1	1
11728	7	29.585	111	+25	182	8	3
	7	30.508	110	+23	88	5	3
	7	31.508	112	+23	90	6	3
	8	1.772	117	+24	36	2	1
	8	2.598	116	+23	48	3	1
	8	3.519	117	+24	16	1	1
	8	4.574	111	+26	40	6	3
	8	5.757	117	+23	80	2	2
	8	6.615	115	+26	24	3	1
	8	7.551	114	+26	6	1	1
11729	7	30.508	90	+17	533	3	1
	7	31.508	86	+17	752	4	2
	8	1.772	86	+19	957	6	3
	8	2.598	85	+18	1006	12	4
	8	3.519	88	+17	1080	25	10
	8	4.574	88	+20	932	29	7
	8	5.757	89	+19	1156	11	7
	8	6.615	87	+20	1020	18	9
	8	7.551	87	+19	1013	20	7
	8	8.531	88	+18	897	9	2
	8	9.524	91	+19	808	13	5

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
	8	10.524	92	+18	617	15	3
	8	11.531	93	+20	630	4	2
11730	7	31.508	83	+12	533	1	1
	8	1.772	77	+15	678	5	4
	8	2.598	73	+14	496	9	5
	8	3.519	79	+14	479	3	3
	8	4.574	77	+16	436	5	4
	8	5.757	78	+16	558	5	3
	8	6.615	83	+15	339	2	1
	8	7.551	83	+14	339	2	1
	8	8.531	85	+14	364	2	1
	8	9.524	85	+14	339	2	1
	8	10.524	84	+15	376	2	2
	8	11.531	85	+16	388	1	1
	8	12.596	86	+16	485	1	1
11731	8	1.772	95	+22	52	3	3
	8	2.598	95	+22	52	6	3
	8	3.519	96	+21	60	6	2
	8	4.574	94	+22	76	10	3
	8	5.757	96	+23	96	3	2
	8	6.615	95	+24	36	2	1
	8	7.551	96	+22	16	1	1
11732	8	1.772	89	−22	32	2	1
	8	2.598	88	−25	24	3	2
	8	4.574	86	−22	64	7	3
	8	5.757	89	−22	77	2	2
	8	6.615	93	−19	36	1	1
	8	7.551	93	−19	24	2	1
	8	8.531	95	−18	16	1	1
11733	8	2.598	56	+24	48	1	1
	8	3.519	55	+24	48	1	1
	8	4.574	50	+26	40	2	2
	8	5.757	56	+25	48	1	1
	8	6.615	50	+25	48	2	2
	8	7.551	56	+24	16	1	1
11734	8	4.574	24	+15	85	3	2
	8	5.757	26	+15	56	4	3
	8	6.615	27	+13	84	5	3
	8	7.551	30	+11	44	4	3
	8	8.531	28	+12	85	5	2
	8	9.524	29	+12	48	6	2
11735	8	5.757	9	+24	921	2	1
	8	6.615	7	+20	897	4	3
	8	7.551	1	+20	1195	15	8
	8	8.531	1	+21	1099	21	9
	8	9.524	1	+21	1037	36	11
	8	10.524	1	+22	899	48	9
	8	11.531	2	+22	1016	30	11
	8	12.596	0	+22	855	37	16
	8	13.621	358	+22	751	6	4
	8	14.750	0	+23	557	5	3
	8	15.531	357	+22	451	15	7
	8	16.534	358	+24	307	5	2
	8	17.530	0	+24	300	6	5
	8	18.587	359	+23	177	2	2
11736	8	6.615	63	−22	28	2	2
	8	7.551	63	−21	6	1	1
11737	8	7.551	72	+18	22	3	2
	8	8.531	72	+20	12	1	1
	8	9.524	74	+19	44	6	2
11738	8	7.551	69	+27	56	5	2
	8	8.531	70	+27	48	4	2
	8	9.524	75	+25	24	2	1
	8	10.524	75	+25	12	1	1
	8	11.531	72	+26	12	2	1
11739	8	7.551	345	+21	145	1	1
	8	8.531	344	+23	121	3	2
	8	9.524	346	+23	73	1	1
	8	10.524	346	+23	48	1	1
	8	11.531	345	+23	24	2	1
	8	12.596	346	+22	24	2	2
	8	13.621	343	+24	48	1	1
	8	14.750	348	+25	133	5	3
	8	15.531	347	+25	36	3	2
	8	16.534	345	+26	22	3	2
	8	17.530	345	+25	12	2	1
11740	8	8.531	326	−16	388	1	1
	8	9.524	331	−16	630	3	1
	8	10.524	324	−18	932	12	4
	8	11.531	325	−17	728	13	5
	8	12.596	324	−18	685	28	9
	8	13.621	324	−17	1042	9	8
	8	14.750	324	−17	763	15	9
	8	15.531	325	−17	690	28	15
	8	16.534	325	−16	704	24	9
	8	17.530	325	−17	374	16	9
	8	18.587	326	−17	277	7	7
	8	19.616	335	−15	145	1	1
	8	20.549	335	−15	145	1	1
11741	8	10.524	323	−22	12	1	1
	8	11.531	323	−23	170	8	2
	8	12.596	324	−22	388	6	1
	8	13.621	323	−22	678	3	2
	8	14.750	323	−21	921	4	2
	8	15.531	323	−22	618	7	4
	8	16.534	323	−22	630	5	2
	8	17.530	323	−22	606	3	2
	8	18.587	322	−23	557	4	2
	8	19.616	324	−24	582	2	2
	8	20.549	324	−23	678	2	2
	8	21.593	327	−22	194	1	1
11742	8	11.531	304	−18	121	1	1
	8	12.596	304	−16	73	1	1
	8	13.621	302	−16	73	1	1
	8	14.750	304	−16	36	1	1
	8	15.531	305	−17	16	1	1
	8	16.534	304	−16	16	1	1
11743	8	11.531	303	+26	12	1	1
	8	12.596	306	+27	18	3	3
	8	13.621	307	+28	206	4	3
	8	14.750	307	+29	278	4	3
	8	15.531	307	+27	120	10	5

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	8 16.534	305	+29	60	3	3
	8 17.530	303	+26	12	1	1
	8 18.587	304	+27	12	1	1
11745	8 12.596	321	+25	16	1	1
11746	8 14.750	257	+21	654	1	1
	8 15.531	256	+21	497	2	2
	8 16.534	257	+19	461	1	1
	8 17.530	257	+20	436	1	1
	8 18.587	256	+21	364	1	1
	8 19.616	257	+20	388	1	1
	8 20.549	257	+21	364	2	1
	8 21.593	258	+24	603	13	6
	8 22.524	256	+21	388	2	1
	8 23.538	255	+23	484	4	2
	8 24.542	255	+23	484	2	2
	8 25.688	254	+21	582	1	1
	8 26.658	254	+23	582	1	1
11747	8 15.531	240	+25	121	2	2
	8 16.534	240	+25	209	7	3
	8 17.530	240	+25	193	4	3
	8 18.587	241	+26	85	4	2
	8 19.616	242	+25	72	3	3
	8 20.549	244	+25	24	2	1
11748	8 16.534	240	−23	24	1	1
	8 17.530	240	−22	24	1	1
	8 18.587	234	−23	135	4	4
	8 19.616	235	−23	460	7	6
	8 20.549	234	−22	460	12	7
	8 21.593	235	−21	466	29	7
	8 22.524	234	−21	568	18	10
	8 23.538	234	−22	500	25	8
	8 24.542	234	−22	451	17	7
	8 25.688	243	−23	194	2	1
	8 26.658	242	−22	218	1	1
	8 27.548	242	−21	291	1	1
11749	8 15.531	234	+47	194	1	1
	8 16.534	229	+46	194	1	1
	8 17.530	221	+47	388	2	2
	8 18.587	219	+47	412	2	2
	8 19.616	225	+47	267	1	1
	8 20.549	222	+47	267	1	1
	8 21.593	215	+48	314	16	6
	8 22.524	216	+47	254	5	4
	8 23.538	210	+47	222	4	3
	8 24.542	208	+47	180	3	3
	8 25.688	212	+47	158	1	1
	8 26.658	210	+48	158	1	1
	8 27.548	209	+48	145	1	1
	8 28.538	206	+48	97	1	1
	8 29.544	204	+48	97	1	1
	8 30.542	203	+47	32	1	1
11750	8 17.530	307	+26	36	3	2
	8 18.587	306	+28	12	1	1
11751	8 17.530	260	−20	42	3	3
	8 18.587	260	−20	290	9	5
	8 19.616	260	−20	484	9	6
		°	°			
	8 20.549	260	−19	727	17	8
	8 21.593	259	−19	787	33	9
	8 22.524	260	−20	835	18	10
	8 23.538	259	−19	1188	14	7
	8 24.542	259	−20	948	14	6
	8 25.688	263	−22	776	3	2
11752	8 17.530	216	+22	97	1	1
	8 18.587	217	+22	36	1	1
	8 19.616	217	+22	36	1	1
	8 20.549	215	+23	48	3	2
11753	8 17.530	207	−24	291	1	1
	8 18.587	212	−21	145	2	2
	8 19.616	216	−21	158	1	1
	8 20.549	218	−21	97	1	1
	8 21.593	217	−19	30	7	2
	8 22.524	217	−19	12	1	1
	8 23.538	213	−20	18	2	2
	8 24.542	210	−20	12	1	1
11754	8 18.587	208	−24	679	2	2
	8 19.616	210	−24	775	2	2
	8 20.549	210	−24	617	5	3
	8 21.593	209	−23	392	4	3
	8 22.524	210	−23	533	1	1
	8 23.538	210	−24	485	1	1
	8 24.542	209	−24	461	1	1
	8 25.688	211	−25	533	1	1
	8 26.658	209	−25	509	1	1
	8 27.548	210	−25	485	1	1
	8 28.538	211	−24	533	1	1
	8 29.544	210	−22	582	1	1
11755	8 18.587	321	+35	108	5	3
	8 19.616	321	+36	242	2	2
	8 20.549	319	+36	267	2	2
	8 21.593	319	+36	193	2	2
11756	8 18.587	275	−27	56	3	2
	8 19.616	275	−26	176	9	6
	8 20.549	275	−26	318	14	7
	8 21.593	275	−26	471	25	8
	8 22.524	277	−25	460	9	4
	8 23.538	275	−25	703	5	3
	8 24.542	275	−26	679	4	2
11757	8 20.549	229	+22	48	2	1
	8 21.593	229	+23	124	20	8
	8 22.524	228	+23	100	7	4
	8 23.538	228	+22	96	6	4
	8 24.542	226	+23	30	4	3
11758	8 18.587	205	−28	73	1	1
	8 19.616	205	−27	532	4	4
	8 20.549	204	−27	715	6	4
	8 21.593	206	−26	836	19	4
	8 22.524	204	−27	932	15	8
	8 23.538	205	−28	758	12	7
	8 24.542	205	−28	502	16	7
	8 25.688	207	−29	504	7	5
	8 26.658	205	−29	351	6	4
	8 27.548	205	−28	322	6	4

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
	8	28.538	204	−28	97	1	1
	8	29.544	205	−26	85	2	2
11759	8	18.587	201	−14	24	1	1
	8	19.616	203	−15	32	1	1
	8	20.549	203	−15	32	1	1
	8	21.593	205	−13	12	1	1
	8	22.524	203	−14	12	1	1
	8	23.538	203	−15	12	1	1
11760	8	19.616	260	+23	76	5	4
	8	20.549	259	+23	181	8	5
	8	22.524	258	+23	255	9	3
	8	23.538	261	+22	73	4	1
	8	24.542	258	+22	40	4	2
11761	8	20.549	201	−20	12	1	1
11762	8	20.549	208	+18	12	1	1
	8	21.593	205	+22	12	1	1
11763	8	20.549	203	+30	12	1	1
	8	21.593	205	+32	60	7	4
	8	22.524	204	+32	302	14	7
	8	23.538	203	+30	513	24	7
	8	24.542	202	+30	790	24	9
	8	25.688	206	+29	1225	9	7
	8	26.658	204	+30	1429	23	7
	8	27.548	205	+30	1346	16	6
	8	28.538	203	+30	1283	14	7
	8	29.544	200	+30	1782	17	10
	8	30.542	198	+30	665	5	4
	8	31.555	194	+31	412	5	3
11764	8	21.593	215	+26	6	1	1
11765	8	22.524	259	+27	109	5	2
	8	23.538	257	+27	356	4	4
	8	24.542	256	+26	448	8	4
	8	25.688	252	+25	315	1	1
	8	26.658	252	+25	242	1	1
11766	8	22.524	234	+28	12	1	1
	8	23.538	242	+27	6	1	1
11767	8	22.524	146	−23	97	1	1
	8	23.538	148	−26	48	1	1
	8	24.542	142	−27	36	2	2
	8	25.688	151	−25	48	1	1
	8	26.658	149	−25	32	1	1
	8	27.548	149	−24	24	1	1
11768	8	23.538	140	+26	36	2	1
	8	24.542	141	+26	16	1	1
11769	8	24.542	242	−30	12	2	1
	8	25.688	246	−31	32	1	1
	8	26.658	242	−32	218	2	2
	8	27.548	238	−31	145	1	1
11770	8	24.542	180	−25	24	2	2
	8	26.658	181	−24	60	2	2
	8	27.548	182	−25	64	2	2
	8	28.538	182	−25	36	2	2
	8	29.544	178	−24	16	2	1
11772	8	26.658	230	+26	40	2	2
	8	27.548	229	+25	24	1	1
	8	28.538	225	+26	97	2	1
11773	8	26.658	148	+25	109	3	2
	8	27.548	148	+24	158	6	3
	8	28.538	148	+24	112	8	5
	8	29.544	146	+26	44	9	3
	8	30.542	147	+26	56	4	4
	8	31.555	144	+27	24	2	2
	9	1.537	151	+24	16	1	1
	9	2.593	149	+24	72	2	2
	9	3.718	148	+23	158	2	2
11774	8	26.658	149	−17	72	2	2
	8	27.548	149	−17	60	2	2
	8	28.538	153	−16	28	2	2
	8	29.544	153	−16	12	2	2
11775	8	28.538	114	−24	12	1	1
11776	8	26.658	101	−30	267	2	2
	8	27.548	101	−30	679	3	2
	8	28.538	102	−31	363	5	2
	8	29.544	101	−29	740	14	5
	8	30.542	102	−29	740	13	8
	8	31.555	102	−30	697	12	8
	9	1.537	102	−29	500	12	6
	9	2.593	101	−29	327	8	5
	9	3.718	100	−30	270	6	4
	9	4.544	101	−30	234	4	3
	9	5.549	108	−29	137	2	2
	9	6.574	101	−29	347	4	2
11777	8	26.658	91	+18	485	2	1
	8	27.548	90	+16	715	4	3
	8	28.538	92	+17	695	14	6
	8	29.544	91	+17	797	24	8
	8	30.542	91	+17	694	25	8
	8	31.555	92	+17	663	25	12
	9	1.537	93	+17	588	12	5
	9	2.593	91	+19	514	9	8
	9	3.718	94	+18	440	6	5
	9	4.544	98	+17	291	3	1
	9	5.549	98	+17	339	1	1
	9	6.574	97	+17	242	2	1
	9	7.742	100	+16	194	1	1
11778	8	27.548	90	−23	412	2	2
	8	28.538	90	−23	72	4	2
	8	29.544	90	−22	64	4	2
	8	30.542	90	−22	32	2	2
	8	31.555	94	−22	6	1	1
11779	8	26.658	87	+20	388	2	1
	8	27.548	89	+16	145	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	8 28.538	88	+17	194	1	1
	8 29.544	89	+17	145	3	1
	8 30.542	89	+17	170	1	1
	8 31.555	89	+17	121	1	1
	9 1.537	89	+18	279	3	2
	9 2.593	89	+17	226	5	2
	9 3.718	90	+17	73	2	1
	9 4.544	89	+19	67	2	2
	9 5.549	90	+17	64	4	3
11780	8 27.548	101	+17	24	1	1
	8 28.538	101	+16	61	3	1
	8 29.544	101	+18	30	3	2
	8 30.542	102	+19	22	2	2
	8 31.555	105	+18	22	3	2
11781	8 27.548	83	+13	448	3	3
	8 28.538	86	+14	315	9	4
	8 29.544	84	+14	317	9	5
	8 30.542	83	+14	238	5	3
	8 31.555	85	+14	176	3	3
	9 1.537	84	+15	176	2	2
	9 2.593	83	+13	158	1	1
	9 3.718	83	+14	182	1	1
	9 4.544	84	+14	182	1	1
	9 5.549	83	+14	145	1	1
	9 6.574	83	+14	182	1	1
	9 7.742	88	+12	218	2	2
11782	8 29.544	88	−30	12	2	2
	8 30.542	90	−28	12	1	1
	8 31.555	90	−29	42	4	2
	9 1.537	89	−28	32	1	1
11783	8 28.538	81	+32	54	3	2
	8 29.544	78	+33	139	4	3
	8 30.542	79	+33	306	12	6
	8 31.555	80	+32	505	14	8
	9 1.537	78	+33	591	24	10
	9 2.593	78	+33	639	16	11
	9 3.718	78	+33	682	15	8
	9 4.544	79	+32	513	17	7
	9 5.549	76	+33	369	13	8
	9 6.574	80	+32	315	2	1
	9 7.742	81	+31	291	1	1
	9 8.706	81	+32	242	2	1
11784	8 29.544	148	−23	122	5	2
	8 30.542	149	−24	170	4	2
	8 31.555	150	−25	194	3	2
	9 1.537	151	−24	85	2	2
	9 2.593	152	−23	61	1	1
11785	8 29.544	126	+10	12	2	2
	8 30.542	125	+10	12	1	1
11786	8 29.544	118	+21	28	2	2
	8 30.542	120	+21	12	1	1
	8 31.555	120	+21	84	5	2
	9 1.537	120	+22	36	2	2
	9 2.593	122	+20	24	2	1
11789	8 30.542	110	+22	28	4	2
	8 31.555	111	+22	24	3	2
	9 1.537	113	+22	84	7	2
	9 2.593	113	+23	234	8	6
	9 3.718	114	+22	452	8	5
	9 4.544	113	+22	764	17	5
	9 5.549	110	+22	689	9	6
	9 6.574	110	+22	283	3	3
11791	9 1.537	47	+16	12	1	1
	9 2.593	47	+17	6	1	1
11792	9 2.593	10	−16	48	2	1
	9 3.718	13	−14	32	2	2
	9 4.544	13	−15	113	4	3
	9 5.549	14	−15	138	14	6
	9 6.574	14	−16	88	5	3
	9 7.742	15	−14	96	6	3
	9 8.706	15	−15	137	3	3
	9 9.606	15	−15	72	2	2
	9 10.551	19	−14	48	4	4
11795	9 4.544	41	+ 8	44	3	2
11796	9 4.544	339	−15	24	1	1
	9 5.549	337	−17	524	9	5
	9 6.574	339	−17	496	9	4
	9 7.742	340	−16	408	5	3
	9 8.706	340	−16	427	7	7
	9 9.606	341	−17	557	9	5
	9 10.551	341	−17	448	9	6
	9 11.633	340	−17	411	10	6
	9 12.542	342	−16	249	16	8
	9 13.547	343	−17	169	4	2
	9 14.553	344	−17	194	2	2
	9 15.589	351	−16	194	1	1
11797	9 5.549	326	−25	533	3	2
	9 6.574	320	−25	2238	17	8
	9 7.742	320	−25	2400	14	8
	9 8.706	322	−25	2400	14	8
	9 9.606	320	−26	2458	20	9
	9 10.551	321	−26	2346	32	8
	9 11.633	321	−26	2714	32	15
	9 12.542	322	−25	2482	49	17
	9 13.547	322	−25	1962	36	19
	9 14.553	323	−25	1789	19	13
	9 15.589	324	−26	891	38	15
	9 16.617	324	−26	641	17	8
	9 17.553	319	−24	266	2	2
11798	9 6.574	60	+25	145	4	3
	9 7.742	62	+24	85	2	2
11799	9 6.574	46	−19	12	1	1
11800	9 6.574	35	−34	18	2	2
	9 7.742	32	−34	12	1	1
11801	9 7.742	69	+15	24	2	2

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11802	9	7.742	61	+20	30	2	2
	9	8.706	65	+19	97	1	1
11803	9	7.742	358	+22	16	1	1
11804	9	7.742	338	+14	6	1	1
11806	9	8.706	346	+25	24	1	1
	9	9.606	346	+24	16	1	1
	9	10.551	347	+26	12	1	1
11807	9	9.606	270	−26	145	1	1
	9	10.551	269	−26	194	1	1
	9	11.633	271	−26	242	2	1
	9	12.542	272	−26	266	2	2
	9	13.547	272	−26	194	2	1
	9	14.553	271	−26	145	2	1
	9	15.589	270	−25	121	2	2
	9	16.617	270	−26	105	2	2
	9	17.553	270	−25	105	3	2
	9	18.551	268	−24	113	3	3
	9	19.548	268	−24	194	2	2
	9	20.552	267	−25	96	2	2
	9	21.553	268	−23	73	1	1
11808	9	11.633	267	−19	73	1	1
11809	9	10.551	258	−20	606	4	4
	9	11.633	258	−21	582	2	2
	9	12.542	261	−21	721	9	6
	9	13.547	261	−22	657	11	6
	9	14.553	262	−21	558	6	3
	9	15.589	260	−21	424	16	7
	9	16.617	260	−20	272	13	8
	9	17.553	258	−20	419	6	6
	9	18.551	258	−20	255	8	4
	9	19.548	257	−19	198	3	3
	9	20.552	258	−20	145	2	2
	9	21.553	257	−20	80	2	2
11811	9	10.551	251	−20	97	1	1
	9	11.633	253	−17	496	6	6
	9	12.542	253	−18	872	13	4
	9	13.547	253	−18	970	19	8
	9	14.553	255	−17	849	8	6
	9	15.589	254	−17	530	29	9
	9	16.617	255	−17	403	22	10
	9	17.553	253	−18	465	7	5
	9	18.551	253	−17	342	15	7
	9	19.548	253	−17	330	9	6
	9	20.552	257	−17	157	2	2
	9	21.553	258	−16	145	1	1
	9	22.681	263	−16	97	1	1
11812	9	10.551	253	+24	97	1	1
	9	11.633	252	+22	218	2	2
	9	12.542	253	+21	210	6	3
	9	13.547	251	+21	202	7	3
	9	14.553	251	+22	209	9	4
	9	15.589	252	+23	60	8	3
	9	16.617	254	+23	32	1	1
	9	17.553	251	+23	73	1	1

No.	Date		L	φ	A	s	p
			°	°			
	9	18.551	251	+23	16	1	1
	9	19.548	251	+24	32	1	1
	9	20.552	251	+24	12	1	1
	9	21.553	249	+22	6	1	1
11813	9	12.542	352	+21	160	7	4
	9	13.547	350	+21	225	4	4
	9	14.553	351	+23	339	5	2
	9	15.589	351	+22	274	6	4
11814	9	11.633	290	+20	16	1	1
	9	12.542	292	+20	72	4	4
	9	13.547	292	+20	40	4	3
	9	14.553	291	+20	28	2	2
	9	15.589	289	+23	24	11	4
11815	9	11.633	260	−24	169	4	3
	9	12.542	260	−25	177	6	4
	9	13.547	260	−25	194	7	2
	9	14.553	261	−23	206	6	3
	9	15.589	261	−23	138	23	8
	9	16.617	261	−23	78	7	5
	9	17.553	263	−24	12	1	1
11816	9	12.542	243	−25	72	3	2
	9	13.547	249	−24	16	1	1
	9	14.553	249	−24	18	2	2
	9	15.589	247	−24	18	6	2
	9	18.551	249	−24	16	3	1
11817	9	12.542	353	−29	40	3	2
11818	9	12.542	308	+44	6	1	1
	9	13.547	310	+44	121	4	2
	9	14.553	310	+45	206	3	2
	9	15.589	309	+45	119	12	4
	9	16.617	310	+44	44	5	2
	9	17.553	310	+45	48	1	1
	9	18.551	307	+45	24	1	1
11819	9	13.547	268	−33	16	1	1
11820	9	12.542	266	+21	36	1	1
	9	13.547	265	+20	16	1	1
	9	14.553	271	+22	12	1	1
	9	15.589	261	+21	18	8	2
	9	20.552	270	+21	24	1	1
	9	21.553	258	+20	68	2	2
	9	22.681	264	+22	36	1	1
11821	9	13.547	254	+27	32	1	1
11822	9	15.589	243	+28	24	4	2
	9	16.617	242	+26	18	3	3
11823	9	12.542	232	−31	194	1	1
	9	13.547	231	−33	218	2	1
	9	14.553	231	−32	194	1	1
	9	15.589	230	−31	157	5	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	9 16.617	232	−31	121	2	1
	9 17.553	230	−31	133	1	1
	9 18.551	230	−31	97	1	1
	9 19.548	230	−32	64	2	2
	9 20.552	231	−31	24	2	1
	9 21.553	229	−31	16	1	1
	9 22.681	232	−30	12	1	1
	9 23.602	230	−31	6	1	1
11824	9 12.542	232	+26	12	1	1
	9 13.547	226	+24	121	1	1
	9 14.553	228	+24	145	1	1
	9 15.589	224	+26	212	7	4
	9 16.617	227	+25	143	6	4
	9 17.553	226	+24	206	5	4
	9 18.551	225	+24	177	7	4
	9 19.548	224	+24	210	5	3
	9 20.552	225	+26	177	2	2
	9 21.553	227	+25	121	1	1
	9 22.681	227	+26	109	1	1
	9 23.602	227	+25	139	6	3
11825	9 13.547	321	+15	6	1	1
	9 14.553	322	+15	12	1	1
	9 15.589	323	+15	54	9	4
	9 16.617	324	+14	76	4	3
	9 17.553	324	+15	266	2	2
11826	9 13.547	220	−15	145	2	1
	9 14.553	214	−16	497	4	4
	9 15.589	216	−15	253	21	8
	9 16.617	217	−15	241	28	9
	9 17.553	218	−16	360	10	7
	9 18.551	220	−16	180	8	6
	9 19.548	223	−16	85	3	2
	9 20.552	222	−16	115	4	3
	9 21.553	221	−16	201	8	4
	9 22.681	223	−15	60	7	3
	9 23.602	223	−15	60	5	3
11827	9 14.553	284	+25	73	3	1
11828	9 16.617	251	−23	16	5	1
11829	9 14.553	203	+30	533	2	2
	9 15.589	201	+34	246	7	4
	9 16.617	203	+31	210	5	2
	9 17.553	200	+29	218	2	1
	9 18.551	201	+30	230	5	3
	9 19.548	201	+30	174	5	3
	9 20.552	201	+31	121	6	3
	9 21.553	200	+32	103	4	4
	9 22.681	196	+34	60	7	3
	9 23.602	197	+30	16	5	1
11830	9 15.589	198	−24	436	1	1
	9 16.617	199	−24	291	1	1
	9 17.553	199	−24	388	2	1
	9 18.551	199	−24	291	2	1
	9 19.548	200	−24	279	1	1
	9 20.552	197	−25	270	4	3
	9 21.553	197	−24	224	4	3
	9 22.681	196	−24	185	11	4

No.	Date	L	φ	A	s	p
		°	°			
	9 23.602	195	−25	173	11	3
	9 24.771	195	−24	145	1	1
	9 25.549	197	−25	254	2	2
	9 26.587	196	−22	218	1	1
11831	9 15.589	308	−32	40	6	2
	9 16.617	309	−32	18	3	2
	9 17.553	305	−31	16	1	1
11832	9 15.589	196	+25	32	1	1
	9 16.617	198	+25	16	1	1
	9 17.553	197	+24	24	1	1
	9 18.551	196	+24	16	1	1
	9 19.548	196	+24	12	1	1
11833	9 16.617	186	+33	24	1	1
11834	9 16.617	241	−15	6	1	1
11835	9 16.617	193	+24	40	4	2
	9 17.553	192	+22	307	6	4
	9 18.551	190	+22	331	12	7
	9 19.548	192	+23	369	5	4
	9 20.552	192	+21	387	7	5
	9 21.553	192	+22	200	6	3
	9 22.681	192	+23	139	17	6
	9 23.602	191	+23	66	8	3
	9 24.771	194	+20	97	1	1
	9 25.549	195	+21	48	1	1
	9 26.587	195	+21	24	1	1
11836	9 16.617	175	+27	338	4	3
	9 17.553	177	+25	525	3	3
	9 18.551	175	+26	655	5	3
	9 19.548	173	+27	472	5	4
	9 20.552	174	+27	363	5	2
	9 21.553	171	+27	218	5	3
	9 22.681	174	+28	167	15	5
	9 23.602	174	+27	151	9	5
	9 24.771	174	+25	145	1	1
	9 25.549	175	+26	103	2	2
	9 26.587	173	+25	73	1	1
11838	9 18.551	256	+12	117	7	4
	9 19.548	256	+12	206	4	4
	9 20.552	258	+12	157	5	3
	9 21.553	256	+12	64	3	2
	9 22.681	254	+11	61	1	1
11839	9 18.551	268	−15	24	1	1
11840	9 20.552	178	+12	161	5	5
	9 21.553	178	+12	181	5	4
	9 22.681	179	+13	222	14	7
	9 23.602	179	+12	145	9	5
	9 24.771	185	+11	170	1	1
	9 25.549	186	+12	194	1	1
	9 26.587	186	+12	194	1	1
	9 27.740	188	+13	242	1	1
	9 28.604	187	+13	242	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	*L*	*φ*	*A*	*s*	*p*
		°	°			
11841	9 19.548	270	−21	121	1	1
	9 20.552	272	−22	48	1	1
11842	9 19.548	245	−14	22	3	2
	9 20.552	246	−14	56	2	2
	9 21.553	247	−13	24	2	1
	9 22.681	251	−12	24	1	1
11844	9 19.548	168	−14	64	4	2
	9 20.552	168	−14	44	2	2
	9 21.553	170	−13	24	1	1
	9 22.681	172	−12	12	2	1
11845	9 20.552	170	+18	16	1	1
11846	9 20.552	126	+22	145	1	1
	9 21.553	123	+21	145	2	1
	9 22.681	127	+23	176	5	2
	9 23.602	124	+24	145	4	3
	9 24.771	124	+21	121	1	1
	9 25.549	126	+22	182	2	2
	9 26.587	125	+21	121	1	1
	9 27.740	125	+22	121	1	1
	9 28.604	125	+22	121	1	1
	9 29.598	125	+23	121	2	1
	9 30.665	125	+21	97	1	1
	10 1.575	124	+22	109	2	2
	10 2.569	125	+23	73	1	1
11847	9 21.553	263	+21	48	1	1
11849	9 22.681	250	−24	121	2	2
11850	9 22.681	237	−16	6	2	1
	9 23.602	232	−18	32	5	2
11851	9 22.681	185	+27	12	6	2
	9 23.602	186	+27	12	3	1
11852	9 22.681	178	+36	30	12	5
	9 23.602	177	+37	12	2	2
11853	9 22.681	117	−18	34	5	3
	9 23.602	118	−18	90	16	6
	9 24.771	121	−18	32	1	1
	9 25.549	124	−19	12	1	1
11854	9 23.602	99	−15	56	10	4
	9 24.771	95	−15	48	2	2
	9 25.549	97	−16	138	6	3
	9 26.587	96	−16	169	3	3
	9 27.740	99	−16	137	6	4
	9 28.604	97	−16	98	15	5
	9 29.598	100	−15	50	10	3
	9 30.665	102	−15	48	1	1
	10 1.575	100	−14	48	3	3
	10 2.569	103	−14	61	1	1
	10 3.577	104	−14	48	1	1
11855	9 22.681	98	−28	145	1	1
	9 23.602	96	−29	226	2	2
	9 24.771	92	−28	266	2	2
	9 25.549	94	−29	303	3	2
	9 26.587	94	−29	464	8	5
	9 27.740	95	−28	371	6	3
	9 28.604	93	−28	333	9	4
	9 29.598	93	−28	218	7	3
	9 30.665	91	−29	339	1	1
	10 1.575	93	−28	388	1	1
	10 2.569	92	−27	388	1	1
	10 3.577	93	−29	388	1	1
11856	9 23.602	201	+34	12	2	1
11857	9 23.602	97	+21	12	2	1
11858	9 23.602	89	−29	218	2	1
	9 24.771	89	−28	194	1	1
	9 25.549	85	−30	379	7	5
	9 26.587	85	−29	461	5	3
	9 27.740	86	−29	444	7	4
	9 28.604	85	−29	371	16	5
	9 29.598	83	−29	374	45	7
	9 30.665	83	−30	496	10	5
	10 1.575	84	−29	800	10	6
	10 2.569	83	−28	751	6	4
	10 3.577	82	−28	863	6	5
	10 5.551	91	−28	630	3	3
11860	9 25.549	65	+20	290	2	2
	9 26.587	64	+20	461	2	2
	9 27.740	64	+20	512	4	4
	9 28.604	63	+20	376	3	2
	9 29.598	66	+20	369	7	4
	9 30.665	65	+19	436	2	1
	10 1.575	63	+21	460	5	3
	10 2.569	62	+20	388	5	3
	10 3.577	62	+21	472	4	3
	10 5.551	63	+20	283	2	2
	10 6.620	64	+24	291	3	1
	10 7.589	66	+22	194	1	1
11861	9 25.549	65	+32	48	1	1
	9 26.587	63	+32	48	1	1
	9 27.740	63	+34	48	1	1
	9 28.604	61	+34	24	1	1
	9 29.598	60	+34	16	3	1
	9 30.665	62	+33	56	3	2
	10 1.575	61	+34	12	1	1
11862	9 25.549	172	−14	30	3	2
	9 26.587	170	−16	73	2	2
11863	9 25.549	153	+24	16	1	1
11864	9 25.549	67	−29	48	2	1
	9 26.587	69	−28	24	1	1
	9 27.740	72	−26	24	2	1
11865	9 27.740	107	−19	24	2	2

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11867	9	27.740	36	+32	73	2	1
	9	28.604	34	+32	64	3	2
	9	29.598	35	+32	36	5	3
	10	6.620	29	+36	12	1	1
11868	9	28.604	117	+47	28	3	2
	9	29.598	117	+46	12	2	1
	9	30.665	116	+45	136	5	5
	10	1.575	114	+47	537	10	5
	10	2.569	113	+46	485	3	2
	10	3.577	111	+46	387	3	2
11869	9	28.604	85	−19	18	2	2
11870	9	28.604	19	+37	97	2	2
	9	29.598	17	+38	36	2	2
11871	9	29.598	124	−17	16	3	1
	10	1.575	122	−19	12	1	1
11872	9	29.598	109	+18	30	10	3
	9	30.665	110	+16	315	5	4
	10	1.575	111	+17	370	11	4
	10	2.569	111	+18	509	4	3
	10	3.577	110	+17	315	4	3
11873	9	30.665	107	+34	36	2	2
11874	10	1.575	352	−24	40	2	2
	10	2.569	347	−22	32	1	1
	10	3.577	350	−23	242	5	3
	10	5.551	350	−22	121	3	1
	10	6.620	355	−23	85	6	2
	10	7.589	349	−21	61	3	1
	10	8.578	351	−21	48	1	1
	10	9.552	350	−20	36	1	1
11875	10	1.575	95	+15	60	4	2
	10	2.569	96	+14	146	4	2
	10	3.577	97	+14	177	4	3
11876	10	1.575	50	+17	6	1	1
	10	2.569	51	+16	113	3	3
	10	3.577	51	+16	56	4	2
	10	5.551	52	+16	24	3	2
11877	10	1.575	10	−29	24	1	1
	10	2.569	14	−26	97	3	2
	10	3.577	15	−26	109	4	2
	10	5.551	19	−25	48	1	1
11878	10	1.575	346	+19	169	6	4
	10	2.569	349	+19	334	12	6
	10	3.577	350	+19	848	22	11
	10	5.551	350	+20	1461	29	10
	10	6.620	351	+20	1233	66	11
	10	7.589	348	+20	1392	34	14
	10	8.578	350	+19	1594	21	14
	10	9.552	349	+20	1461	36	18
	10	10.554	348	+20	1951	24	14
	10	11.549	349	+21	2095	23	11
	10	12.549	346	+21	1454	8	5
11881	10	3.577	325	−16	291	4	1
	10	5.551	325	−15	420	9	6
	10	6.620	327	−16	295	17	4
	10	7.589	327	−15	262	4	3
	10	8.578	326	−15	423	6	5
	10	9.552	327	−14	336	7	6
	10	10.554	332	−14	473	5	4
	10	11.549	330	−14	403	6	5
	10	12.549	332	−14	520	6	4
	10	13.637	333	−14	387	2	2
	10	14.589	334	−15	290	2	2
11882	10	3.577	58	+17	141	5	4
	10	5.551	63	+16	12	1	1
11883	10	3.577	318	−24	291	1	1
	10	5.551	315	−26	436	2	2
	10	6.620	317	−27	303	9	5
	10	7.589	314	−26	218	5	2
	10	8.578	319	−26	182	2	2
	10	9.552	318	−25	122	2	2
	10	10.554	317	−26	145	3	2
	10	11.549	317	−24	48	1	1
	10	12.549	318	−25	136	5	4
	10	13.637	319	−25	460	5	3
	10	14.589	320	−25	533	2	2
	10	15.578	316	−25	339	1	1
11884	10	5.551	304	+26	97	2	1
	10	6.620	304	+25	133	2	1
	10	7.589	304	+26	218	4	1
	10	8.578	302	+26	194	2	1
	10	9.552	300	+26	109	6	4
	10	10.554	300	+27	97	5	4
	10	11.549	299	+26	32	2	2
11885	10	5.551	341	−22	48	4	3
	10	6.620	343	−22	84	11	4
	10	7.589	341	−21	185	6	4
	10	8.578	342	−21	540	14	7
	10	9.552	343	−21	904	29	7
	10	10.554	343	−21	937	11	6
	10	11.549	343	−20	690	8	4
	10	12.549	346	−20	775	3	2
11886	10	5.551	332	+23	38	2	2
	10	6.620	332	+22	16	1	1
	10	7.589	331	+22	12	1	1
11887	10	6.620	268	+19	582	1	1
	10	7.589	270	+21	485	2	1
	10	8.578	269	+21	533	1	1
	10	9.552	269	+22	509	2	1
	10	10.554	267	+21	557	2	2
	10	11.549	268	+23	436	4	3
	10	12.549	264	+22	534	2	2
	10	13.637	265	+22	533	2	2
	10	14.589	270	+22	436	1	1
	10	15.578	269	+22	461	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
	10	16.565	268	+22	533	1	1
	10	17.636	269	+21	436	1	1
	10	18.708	271	+21	485	1	1
11888	10	8.578	17	−16	16	2	1
11889	10	11.549	281	−28	60	3	2
11890	10	8.578	246	−23	242	1	1
	10	9.552	249	−23	321	2	2
	10	10.554	249	−23	355	2	2
	10	11.549	250	−23	339	1	1
	10	12.549	249	−24	291	1	1
	10	13.637	248	−24	315	2	1
	10	14.589	250	−23	291	1	1
	10	15.578	249	−23	267	2	1
	10	16.565	244	−23	375	6	4
	10	17.636	244	−23	314	3	3
	10	18.708	249	−23	218	1	1
	10	19.815	245	−25	546	2	2
	10	20.619	244	−24	456	12	5
11891	10	10.554	322	+29	32	1	1
	10	11.549	319	+28	62	5	4
	10	12.549	320	+28	122	2	2
11893	10	10.554	326	+22	120	4	3
	10	11.549	326	+22	258	11	5
	10	12.549	328	+23	469	7	6
	10	13.637	328	+21	613	10	6
	10	14.589	334	+23	194	1	1
11894	10	12.549	247	−20	140	9	3
	10	13.637	250	−19	158	4	2
	10	14.589	248	−19	73	1	1
	10	15.578	248	−19	73	2	1
11895	10	12.549	244	−27	109	3	3
	10	13.637	242	−28	121	3	3
	10	14.589	245	−27	84	2	2
	10	15.578	248	−25	61	1	1
	10	16.565	248	−26	16	1	1
11896	10	12.549	234	−21	6	1	1
	10	13.637	233	−22	40	4	2
	10	14.589	234	−22	109	2	2
	10	15.578	237	−20	73	1	1
	10	16.565	236	−20	16	3	1
11897	10	13.637	201	−25	121	3	2
	10	14.589	202	−25	121	2	2
	10	15.578	205	−23	121	1	1
	10	16.565	205	−24	97	1	1
	10	17.636	204	−24	121	1	1
	10	18.708	204	−24	36	1	1
11898	10	14.589	244	−20	109	2	2
	10	15.578	244	−19	178	5	3
	10	16.565	245	−19	193	5	4
	10	17.636	243	−20	279	5	4

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
	10	18.708	243	−20	72	2	2
	10	19.815	247	−22	169	3	2
	10	20.619	246	−20	97	6	2
11901	10	15.578	269	−12	64	2	2
	10	16.565	269	−12	73	1	1
	10	17.636	271	−13	73	3	1
11903	10	15.578	155	+25	436	2	2
	10	16.565	156	+23	109	1	1
	10	17.636	155	+23	109	1	1
	10	18.708	156	+23	85	1	1
	10	19.815	156	+23	73	1	1
	10	20.619	154	+23	24	3	3
	10	21.751	154	+24	54	5	5
11904	10	16.565	280	+28	32	1	1
11905	10	16.565	214	+17	60	4	2
	10	17.636	216	+17	132	3	3
	10	18.708	219	+17	32	1	1
	10	19.815	217	+16	121	2	2
	10	20.619	217	+16	166	31	7
	10	21.751	216	+16	424	9	3
11906	10	16.565	187	−26	24	1	1
11907	10	19.815	132	−46	291	2	2
	10	20.619	128	−47	237	26	9
	10	21.751	130	−46	121	4	3
	10	23.634	129	−46	133	11	5
	10	24.705	131	−45	112	5	5
	10	25.551	133	−44	152	4	4
	10	26.615	130	−45	118	15	8
	10	27.615	129	−45	90	12	6
11908	10	19.815	123	+17	73	1	1
	10	20.619	124	+17	182	41	9
	10	21.751	125	+17	188	16	7
	10	23.634	124	+18	88	7	4
	10	24.705	122	+20	72	2	2
	10	25.551	120	+20	16	1	1
	10	26.615	124	+18	12	2	2
	10	27.615	127	+16	12	2	2
11909	10	18.708	199	− 9	72	3	2
	10	19.815	199	−12	473	7	3
	10	20.619	199	− 9	309	46	7
	10	21.751	200	−10	369	21	5
	10	23.634	207	−11	181	2	2
11910	10	18.708	113	+19	327	2	2
	10	19.815	117	+18	242	2	1
	10	20.619	116	+17	242	14	5
	10	21.751	116	+18	194	8	3
	10	23.634	116	+17	213	9	4
	10	24.705	117	+18	64	3	2
	10	25.551	117	+17	61	1	1
	10	26.615	116	+19	28	8	2
	10	27.615	118	+17	24	5	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11911	10	19.815	117	+15	121	1	1
	10	20.619	115	+14	168	19	5
	10	21.751	117	+15	173	9	6
	10	23.634	116	+14	36	1	1
	10	24.705	118	+15	108	3	3
	10	25.551	116	+15	52	2	2
	10	26.615	116	+15	28	11	2
	10	27.615	116	+14	6	1	1
11913	10	20.619	110	−16	6	2	1
	10	21.751	110	−16	28	2	2
11914	10	20.619	98	+33	54	8	3
	10	21.751	99	+33	32	1	1
11915	10	21.751	153	+16	24	3	3
11916	10	21.751	104	−22	24	1	1
	10	24.705	105	−21	109	3	3
	10	25.551	104	−23	133	3	2
	10	26.615	104	−23	44	8	2
11917	10	21.751	86	+12	12	1	1
11918	10	21.751	80	−29	242	1	1
	10	23.634	78	−29	267	1	1
	10	24.705	77	−29	279	1	1
	10	25.551	78	−29	242	1	1
	10	26.615	76	−29	170	1	1
	10	27.615	75	−29	145	2	1
	10	28.600	76	−29	230	2	1
	10	29.617	74	−29	145	1	1
	10	30.744	74	−29	170	1	1
	10	31.758	73	−29	194	1	1
	11	1.736	74	−29	133	1	1
	11	2.681	76	−29	194	1	1
11919	10	21.751	74	−26	145	1	1
	10	23.634	71	−27	170	1	1
	10	24.705	70	−27	97	1	1
	10	25.551	70	−28	121	1	1
	10	26.615	70	−27	73	2	1
	10	27.615	68	−28	54	5	2
	10	28.600	69	−28	61	2	1
	10	29.617	67	−28	48	1	1
	10	30.744	69	−29	16	1	1
	10	31.758	68	−29	24	1	1
	11	1.736	65	−29	64	5	3
	11	2.681	65	−29	24	5	1
11920	10	23.634	59	+14	460	4	4
	10	24.705	60	+15	380	6	5
	10	25.551	62	+14	346	8	6
	10	26.615	63	+15	209	30	8
	10	27.615	64	+16	191	11	8
	10	28.600	63	+15	262	6	4
	10	29.617	60	+15	151	11	5
	10	30.744	61	+13	143	6	5
	10	31.758	64	+13	182	1	1
	11	1.736	64	+13	121	1	1
	11	2.681	65	+13	73	2	1

No.	Date		L	φ	A	s	p
			°	°			
11921	10	23.634	58	−30	376	5	5
	10	24.705	59	−29	593	9	9
	10	25.551	61	−29	181	7	4
	10	26.615	59	−29	277	34	7
	10	27.615	57	−30	377	37	13
	10	28.600	58	−29	447	16	8
	10	29.617	56	−29	322	17	7
	10	30.744	56	−32	484	24	9
	10	31.758	55	−30	753	16	8
	11	1.736	55	−32	565	22	6
	11	2.681	55	−33	218	14	5
	11	3.731	59	−33	291	2	2
11922	10	23.634	189	+35	56	3	2
	10	24.705	188	+36	145	2	2
11923	10	24.705	72	−24	72	4	3
	10	25.551	71	−25	76	4	3
	10	26.615	73	−24	18	6	2
	10	27.615	70	−25	12	3	1
11924	10	23.634	49	−18	678	2	2
	10	24.705	52	−17	630	2	2
	10	25.551	50	−18	775	3	2
	10	26.615	50	−16	701	16	7
	10	27.615	50	−16	618	11	3
	10	28.600	50	−18	775	5	2
	10	29.617	49	−17	622	12	3
	10	30.744	49	−18	679	5	2
	10	31.758	49	−18	799	7	4
	11	1.736	50	−18	645	11	4
	11	2.681	51	−17	400	8	3
	11	3.731	51	−17	412	5	3
	11	4.742	52	−19	121	1	1
11925	10	24.705	176	+30	146	2	2
	10	25.551	178	+29	194	1	1
	10	26.615	175	+31	48	1	1
11926	10	25.551	54	−29	109	2	2
	10	26.615	49	−28	22	5	2
11927	10	26.615	19	−25	24	3	2
	10	27.615	14	−24	30	4	3
	10	28.600	14	−25	32	2	1
	10	29.617	14	−25	16	1	1
	10	30.744	14	−25	6	1	1
11929	10	27.615	2	+20	48	2	1
11930	10	27.615	351	+22	533	2	2
	10	28.600	355	+20	1059	5	4
	10	29.617	351	+21	610	9	5
	10	30.744	352	+21	662	13	7
	10	31.758	352	+22	739	10	6
	11	1.736	352	+21	697	30	11
	11	2.681	353	+20	427	28	10
	11	3.731	352	+20	481	13	7
	11	4.742	351	+22	382	3	3
	11	5.575	349	+22	345	4	2
	11	6.553	351	+21	388	1	1
	11	7.542	351	+21	339	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
	11	8.678	351	+21	388	1	1
	11	9.616	353	+22	242	1	1
11931	10	28.600	351	−18	315	2	2
	10	29.617	351	−17	255	3	2
	10	30.744	350	−17	263	4	4
	10	31.758	351	−17	141	5	2
	11	1.736	354	−17	85	3	2
	11	2.681	352	−17	60	4	2
	11	3.731	351	−18	36	3	2
	11	4.742	353	−16	6	1	1
11932	10	29.617	100	+15	22	2	2
	10	30.744	98	+15	32	2	1
	10	31.758	100	+14	97	1	1
11933	10	29.617	86	+25	16	2	1
	10	30.744	84	+25	24	1	1
11934	10	28.600	355	−31	48	1	1
	10	29.617	356	−30	16	1	1
11935	10	29.617	354	−15	40	3	2
11936	10	28.600	352	−23	72	3	2
	10	29.617	346	−22	173	5	5
	10	30.744	349	−23	101	4	3
	10	31.758	352	−22	56	2	2
	11	1.736	348	−22	80	6	5
	11	2.681	351	−23	16	3	1
	11	3.731	351	−24	32	2	2
11937	10	28.600	339	−13	291	2	1
	10	29.617	340	−12	471	9	5
	10	30.744	337	−13	700	12	9
	10	31.758	339	−13	662	12	8
	11	1.736	339	−13	573	14	7
	11	2.681	340	−14	404	15	8
	11	3.731	339	−14	583	17	11
	11	4.742	338	−15	403	12	6
	11	5.575	341	−14	318	13	6
	11	6.553	343	−13	351	6	5
	11	7.542	346	−13	302	5	4
	11	8.678	351	−12	291	1	1
11938	10	30.744	95	−23	24	1	1
11939	10	30.744	47	+17	12	2	2
11940	10	30.744	330	+26	16	1	1
11941	10	31.758	317	−26	291	1	1
	11	1.736	315	−26	267	1	1
	11	2.681	316	−26	194	1	1
	11	3.731	315	−26	242	1	1
	11	4.742	314	−27	230	1	1
	11	5.575	314	−27	218	2	1
	11	6.553	313	−27	291	1	1
	11	7.542	314	−27	255	1	1

No.	Date		L	φ	A	s	p
			°	°			
	11	8.678	314	−28	242	1	1
	11	9.616	312	−27	230	1	1
	11	10.809	313	−28	242	1	1
	11	11.670	311	−27	194	1	1
11942	11	1.736	8	−26	40	4	3
	11	2.681	6	−27	18	8	2
	11	3.731	7	−27	28	3	2
	11	4.742	6	−27	6	2	1
	11	5.575	7	−26	16	1	1
	11	6.553	8	−26	129	3	2
	11	7.542	7	−26	73	1	1
11943	11	1.736	325	−25	24	1	1
	11	2.681	326	−28	6	2	1
11944	11	1.736	295	−15	181	5	2
	11	2.681	295	−16	569	12	4
	11	3.731	293	−15	634	7	5
	11	4.742	294	−16	812	20	6
	11	5.575	295	−15	939	22	10
	11	6.553	295	−15	1090	15	10
	11	7.542	294	−16	1057	20	11
	11	8.678	296	−15	904	17	7
	11	9.616	296	−15	695	11	5
	11	10.809	296	−16	811	6	6
	11	11.670	304	−14	643	7	3
	11	12.793	303	−13	388	1	1
11945	11	2.681	342	−17	16	5	1
	11	3.731	343	−17	24	2	1
	11	4.742	345	−23	12	2	2
11946	11	2.681	276	+27	509	2	2
	11	3.731	272	+28	630	9	5
	11	4.742	273	+27	1041	21	7
	11	5.575	273	+26	909	36	7
	11	6.553	272	+27	946	16	7
	11	7.542	272	+27	925	20	7
	11	8.678	271	+28	764	17	6
	11	9.616	270	+28	519	21	8
	11	10.809	272	+28	476	7	4
	11	11.670	272	+30	350	6	4
	11	12.793	273	+27	242	2	1
	11	13.548	271	+28	339	1	1
	11	14.545	271	+29	291	1	1
	11	15.541	275	+30	194	1	1
11947	11	3.731	349	+38	68	6	2
	11	4.742	349	+38	307	9	4
	11	5.575	348	+38	347	17	5
	11	6.553	348	+39	323	8	4
	11	7.542	348	+40	231	3	2
	11	8.678	354	+36	242	1	1
11948	11	3.731	263	+24	291	1	1
	11	4.742	262	+24	206	3	1
	11	5.575	261	+24	182	4	2
	11	6.553	262	+24	198	4	3
	11	7.542	262	+24	267	4	3
	11	8.678	262	+24	182	7	2
	11	9.616	261	+23	120	5	3
	11	10.809	260	+23	220	9	7

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
	11	11.670	256	+23	105	6	2
	11	12.793	255	+23	302	12	4
	11	13.548	255	+23	723	11	7
	11	14.545	254	+23	613	8	6
	11	15.541	252	+24	606	4	3
	11	16.567	252	+26	145	1	1
11949	11	3.731	263	−18	485	1	1
	11	4.742	263	−18	533	3	1
	11	5.575	263	−19	654	7	2
	11	6.553	264	−17	944	5	4
	11	7.542	264	−18	1115	14	6
	11	8.678	264	−17	1138	17	5
	11	9.616	265	−18	937	19	8
	11	10.809	264	−19	1123	16	9
	11	11.670	265	−17	917	12	6
	11	12.793	263	−18	570	10	5
	11	13.548	266	−18	461	5	4
	11	14.545	262	−18	347	3	3
	11	15.541	260	−19	436	2	2
11950	11	4.742	18	−21	40	2	2
11951	11	4.742	353	−24	88	7	3
	11	5.575	354	−24	68	5	2
	11	6.553	351	−24	48	1	1
	11	7.542	353	−24	97	2	2
	11	8.678	353	−25	36	1	1
11952	11	4.742	335	+22	6	2	1
	11	7.542	335	+23	24	1	1
11953	11	4.742	245	−21	727	1	1
	11	5.575	241	−23	1830	9	5
	11	6.553	241	−24	2120	17	9
	11	7.542	241	−24	2504	22	9
	11	8.678	241	−23	1733	26	8
	11	9.616	242	−23	1879	23	8
	11	10.809	240	−23	2324	28	13
	11	11.670	239	−24	1904	38	12
	11	12.793	240	−24	1585	44	13
	11	13.548	239	−24	1651	33	13
	11	14.545	241	−24	1371	18	6
	11	15.541	239	−24	1264	12	7
	11	16.567	240	−23	1526	14	6
	11	17.678	238	−25	1018	5	2
11955	11	5.575	323	+25	6	1	1
	11	6.553	325	+24	136	4	4
	11	7.542	323	+24	394	14	9
	11	8.678	325	+24	509	14	6
	11	9.616	323	+25	557	11	5
	11	10.809	320	+26	242	1	1
	11	11.670	323	+29	145	1	1
11956	11	5.575	274	−21	6	1	1
	11	6.553	276	−20	32	1	1
	11	9.616	279	−21	96	4	3
	11	10.809	280	−22	109	2	2
	11	11.670	280	−20	105	2	2
	11	12.793	280	−21	48	2	2
	11	13.548	276	−20	16	1	1

No.	Date		*L*	*φ*	*A*	*s*	*p*
			°	°			
11957	11	6.553	258	+27	60	4	2
	11	7.542	258	+26	391	14	6
	11	8.678	260	+27	230	7	3
	11	9.616	256	+28	84	6	3
	11	10.809	256	+27	72	2	2
	11	11.670	261	+24	56	5	3
11958	11	6.553	219	+15	145	2	1
	11	7.542	217	+17	1018	6	3
	11	8.678	220	+17	920	14	6
	11	9.616	220	+16	977	19	9
	11	10.809	220	+16	1332	22	10
	11	11.670	219	+16	920	17	9
	11	12.793	219	+15	714	24	9
	11	13.548	217	+17	562	18	8
	11	14.545	220	+16	307	5	4
	11	15.541	223	+16	267	2	2
	11	16.567	225	+16	290	2	2
	11	17.678	225	+15	161	2	2
	11	18.595	227	+15	145	1	1
11961	11	10.809	225	−20	134	4	2
	11	11.670	225	−20	234	7	5
	11	12.793	225	−20	503	14	6
	11	13.548	226	−20	488	9	6
	11	14.545	226	−19	792	14	7
	11	15.541	226	−18	1243	15	7
	11	16.567	227	−19	1309	11	6
	11	17.678	227	−19	1055	5	4
	11	18.595	232	−20	194	1	1
11962	11	12.793	178	+25	16	1	1
11963	11	10.809	173	−15	970	3	2
	11	11.670	175	−14	1018	9	5
	11	12.793	176	−13	916	19	9
	11	13.548	178	−14	976	33	11
	11	14.545	177	−14	1198	32	12
	11	15.541	177	−14	1151	25	8
	11	16.567	178	−14	2002	41	9
	11	17.678	177	−13	1594	57	12
	11	18.595	178	−15	2403	58	16
	11	19.556	177	−14	1845	47	13
	11	20.588	177	−15	1453	11	6
	11	21.544	175	−16	1237	7	3
	11	22.577	177	−15	533	2	2
11965	11	12.793	219	−16	36	4	1
11966	11	12.793	213	−10	60	4	3
	11	13.548	213	− 9	73	5	3
	11	14.545	214	− 9	40	2	2
	11	15.541	216	− 8	24	1	1
	11	16.567	218	− 8	16	1	1
	11	17.678	217	− 8	88	5	3
	11	18.595	217	− 8	92	5	4
11967	11	15.541	193	+22	97	2	2
	11	16.567	193	+23	334	7	4
	11	17.678	195	+22	174	9	3
	11	18.595	192	+22	96	3	2
	11	19.556	193	+23	56	2	2

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11968	11	15.541	180	−25	165	7	5
	11	16.567	180	−25	144	9	5
	11	17.678	180	−25	52	6	3
	11	18.595	181	−25	92	6	5
	11	19.556	183	−26	145	7	3
	11	20.588	182	−26	134	2	2
11969	11	16.567	112	−18	140	4	4
	11	17.678	113	−15	322	23	6
	11	18.595	113	−17	408	11	5
	11	19.556	113	−16	477	22	8
	11	20.588	116	−17	387	8	2
	11	21.544	116	−17	665	8	5
	11	22.577	116	−18	707	11	6
	11	23.555	118	−17	824	8	5
	11	24.574	118	−17	678	7	4
	11	25.667	119	−16	605	13	5
11970	11	15.541	107	+14	630	1	1
	11	16.567	107	+14	582	2	1
	11	17.678	110	+16	517	4	2
	11	18.595	107	+14	582	6	1
	11	19.556	108	+15	448	5	3
	11	20.588	108	+15	388	3	2
	11	21.544	109	+15	295	5	4
	11	22.577	109	+15	347	7	5
	11	23.555	108	+15	303	3	2
	11	24.574	108	+15	230	6	3
	11	25.667	107	+16	102	12	7
	11	27.578	107	+17	73	2	1
11971	11	16.567	222	+26	109	6	2
	11	17.678	223	+26	148	8	5
	11	18.595	217	+26	61	1	1
11974	11	17.678	81	−23	630	5	1
	11	18.595	71	−26	1647	16	6
	11	19.556	75	−25	1732	14	8
	11	20.588	75	−25	1599	12	9
	11	21.544	75	−26	1358	14	9
	11	22.577	73	−26	1365	23	12
	11	23.555	76	−25	1438	21	11
	11	24.574	80	−24	1204	26	8
	11	25.667	78	−25	742	40	14
	11	26.560	86	−24	849	5	3
	11	27.578	79	−25	1132	20	9
	11	28.540	81	−25	1284	7	4
	11	29.618	74	−25	145	1	1
11976	11	19.556	77	+35	80	2	2
	11	20.588	80	+35	32	1	1
	11	21.544	81	+34	36	2	1
	11	22.577	80	+35	12	1	1
11977	11	19.556	181	−20	30	4	2
	11	20.588	180	−21	134	2	2
11978	11	19.556	101	−16	72	4	3
	11	20.588	102	−16	121	2	2
	11	21.544	102	−16	52	4	2
11979	11	21.544	158	+31	61	2	1
11981	11	22.577	21	+15	194	4	3
	11	23.555	22	+15	364	5	3
	11	24.574	21	+16	164	5	4
	11	25.667	21	+17	391	32	12
	11	26.560	20	+15	579	13	7
	11	27.578	22	+15	482	24	11
	11	28.540	20	+15	430	16	10
	11	29.618	22	+15	238	4	3
	11	30.589	24	+16	89	3	2
	12	1.687	29	+14	16	2	1
	12	2.673	21	+17	12	1	1
	12	3.651	29	+15	194	1	1
11982	11	25.667	50	−33	12	1	1
11983	11	25.667	38	−27	113	6	3
	11	26.560	37	−30	85	2	2
	11	27.578	37	−29	42	2	2
	11	28.540	33	−29	24	1	1
	11	29.618	36	−29	177	4	3
	11	30.589	35	−28	28	2	2
11984	11	25.667	352	−21	64	5	3
	11	28.540	354	−22	6	1	1
	11	30.589	352	−22	24	1	1
11985	11	25.667	343	−15	395	7	5
	11	26.560	341	−17	169	4	3
	11	27.578	344	−17	156	9	6
	11	28.540	345	−17	88	6	4
	11	29.618	346	−17	101	3	3
	11	30.589	342	−17	40	3	3
	12	1.687	340	−15	32	1	1
	12	2.673	339	−15	64	9	7
	12	3.651	343	−16	193	6	2
	12	4.586	343	−16	97	2	1
	12	5.538	342	−17	73	1	1
	12	6.590	345	−16	97	1	1
11986	11	28.540	2	−25	112	5	4
	11	29.618	3	−26	109	2	2
	11	30.589	4	−25	40	2	2
11987	11	27.578	353	+19	6	1	1
	11	29.618	347	+21	60	2	2
	11	30.589	347	+20	16	1	1
11988	11	27.578	334	+22	109	4	2
	11	28.540	334	+22	443	14	5
	11	29.618	335	+22	920	16	8
	11	30.589	336	+22	689	19	8
	12	1.687	336	+22	832	16	8
	12	2.673	334	+24	502	24	10
	12	3.651	337	+24	665	12	6
	12	4.586	334	+21	650	21	5
	12	5.538	329	+20	630	5	3
	12	6.590	334	+22	1018	5	2
	12	7.587	331	+22	582	1	1
11989	11	27.578	320	+22	91	2	2
	12	2.673	317	+18	6	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date		L	φ	A	s	p
			°	°			
11990	11	27.578	304	−13	194	1	1
	11	28.540	305	−14	436	6	2
	11	29.618	304	−14	339	3	2
	11	30.589	306	−14	265	8	5
	12	1.687	305	−13	306	8	6
	12	2.673	308	−12	64	6	2
	12	3.651	309	−12	48	3	2
	12	4.586	307	−15	34	4	4
11991	11	28.540	303	−26	170	1	1
	11	29.618	302	−27	73	1	1
	11	30.589	302	−26	73	1	1
	12	1.687	300	−26	73	1	1
	12	2.673	302	−25	36	3	1
	12	3.651	302	−26	32	1	1
11992	11	28.540	65	−29	24	1	1
11993	11	28.540	316	+22	32	1	1
	11	29.618	306	+24	145	3	3
	11	30.589	305	+23	367	5	4
	12	1.687	305	+24	375	5	3
	12	2.673	306	+25	266	17	5
	12	3.651	306	+25	395	10	6
	12	4.586	303	+23	298	10	6
	12	5.538	302	+22	327	2	2
	12	6.590	307	+24	206	1	1
	12	7.587	307	+24	267	1	1
	12	8.588	307	+25	194	2	1
11995	12	9.742	305	+25	339	1	1
11996	11	30.589	281	−19	36	1	1
	12	1.687	281	−18	194	2	2
	12	2.673	282	−16	72	11	4
	12	3.651	283	−17	184	6	5
	12	4.586	282	−18	296	17	4
	12	5.538	282	−19	290	8	6
	12	6.590	286	−17	238	10	5
	12	7.587	286	−18	93	4	2
	12	8.588	286	−17	72	5	3
	12	9.742	285	−18	195	5	3
	12	10.590	283	−19	64	2	2
11997	11	30.589	354	+19	24	1	1
	12	1.687	354	+19	32	2	1
	12	2.673	355	+19	30	3	3
	12	3.651	355	+20	279	4	3
	12	4.586	353	+19	170	3	1
11999	11	30.589	342	+14	96	5	3
	12	1.687	341	+15	72	5	3
	12	2.673	338	+15	16	3	1
12000	12	1.687	349	+30	109	3	2
	12	2.673	353	+29	12	1	1
12001	12	1.687	325	+21	40	2	2
	12	2.673	325	+22	18	3	2

No.	Date		L	φ	A	s	p
			°	°			
12002	12	2.673	256	+24	24	1	1
	12	3.651	257	+23	24	1	1
	12	6.590	255	+21	38	3	3
	12	7.587	255	+21	16	1	1
	12	9.742	254	+21	16	1	1
	12	10.590	255	+22	182	4	2
	12	11.700	258	+24	97	1	1
	12	12.641	259	+23	97	1	1
	12	13.674	252	+27	170	1	1
12003	12	1.687	247	−25	485	1	1
	12	2.673	251	−24	242	1	1
	12	3.651	246	−26	448	2	2
	12	4.586	245	−26	363	2	2
	12	5.538	245	−26	460	2	2
	12	6.590	245	−26	345	2	2
	12	7.587	250	−26	412	2	2
	12	8.588	249	−27	355	3	2
	12	9.742	248	−26	315	1	1
	12	10.590	250	−25	436	2	1
	12	11.700	250	−26	194	1	1
	12	12.641	252	−25	364	2	1
	12	13.674	250	−25	339	1	1
	12	14.678	251	−25	485	1	1
12004	12	2.673	313	− 1	6	1	1
12005	12	2.673	252	+28	108	5	3
	12	3.651	256	+27	36	2	2
	12	4.586	255	+26	141	7	3
	12	5.538	255	+26	145	4	2
	12	6.590	255	+26	435	15	5
	12	7.587	256	+27	666	18	8
	12	8.588	254	+26	811	18	7
	12	9.742	249	+28	605	10	4
	12	10.590	255	+27	630	5	3
	12	11.700	249	+29	193	2	2
	12	12.641	251	+27	351	6	3
	12	13.674	258	+23	48	2	1
12006	12	2.673	234	−15	145	1	1
	12	3.651	234	−16	485	2	2
	12	4.586	233	−17	678	13	7
	12	5.538	232	−18	750	8	4
	12	6.590	235	−17	946	13	7
	12	7.587	237	−17	844	20	9
	12	8.588	235	−17	621	23	8
	12	9.742	232	−17	657	22	9
	12	10.590	231	−17	642	11	6
	12	11.700	229	−18	364	3	2
	12	12.641	232	−17	520	5	3
	12	13.674	233	−17	393	6	4
	12	14.678	231	−18	296	14	4
	12	15.744	230	−19	194	1	1
12007	12	3.651	251	+35	16	2	1
	12	4.586	252	+34	16	1	1
12008	12	3.651	229	−24	194	1	1
	12	4.586	229	−24	206	3	2
	12	5.538	229	−25	194	3	2
	12	6.590	230	−24	206	7	4
	12	7.587	232	−23	104	4	3

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
	12 8.588	227	−23	42	6	4
	12 9.742	224	−23	16	2	1
12009	12 3.651	227	−20	727	1	1
	12 4.586	219	−19	1745	7	3
	12 5.538	219	−20	1406	3	3
	12 6.590	219	−19	1584	6	5
	12 7.587	220	−19	1406	8	5
	12 8.588	219	−19	1298	7	4
	12 9.742	219	−19	1186	13	6
	12 10.590	222	−19	1429	10	5
	12 11.700	221	−19	848	5	3
	12 12.641	221	−20	1255	8	6
	12 13.674	221	−20	925	9	4
	12 14.678	219	−21	739	7	4
	12 15.744	221	−21	727	3	3
12010	12 4.586	325	+28	12	2	2
12011	12 4.586	216	−22	145	1	1
	12 5.538	215	−23	145	1	1
	12 6.590	215	−23	254	6	3
	12 7.587	219	−23	194	3	2
	12 8.588	216	−22	226	5	3
	12 9.742	215	−22	258	10	5
	12 10.590	217	−21	266	5	3
	12 11.700	218	−23	145	3	1
	12 12.641	218	−23	315	4	2
	12 13.674	219	−23	206	2	1
	12 14.678	217	−24	145	2	1
	12 15.744	218	−24	170	2	1
12013	12 8.588	214	−12	28	2	2
	12 9.742	212	−11	12	1	1
	12 10.590	215	−11	93	3	2
	12 11.700	216	−11	193	3	3
	12 12.641	217	−12	274	11	5
	12 13.674	217	−13	229	13	4
	12 14.678	214	−13	211	24	7
	12 15.744	219	−15	184	12	6
12014	12 8.588	192	−13	12	1	1
	12 9.742	188	−12	40	2	2
	12 12.641	196	−11	24	1	1
	12 13.674	192	−14	16	2	1
	12 14.678	195	−13	28	9	2
	12 15.744	197	−11	12	1	1
12015	12 8.588	229	−28	6	1	1
12016	12 8.588	179	−26	12	2	1
	12 9.742	180	−25	900	21	9
	12 10.590	181	−26	1099	18	8
	12 11.700	182	−25	823	13	8
	12 12.641	183	−25	1435	29	13
	12 13.674	180	−25	1238	44	13
	12 14.678	180	−26	914	76	20
	12 15.744	182	−26	1199	53	16
	12 16.756	180	−27	1504	15	10
	12 17.719	180	−26	1663	20	9
	12 18.593	183	−24	1697	17	9
	12 19.592	178	−25	435	5	3

No.	Date	L	φ	A	s	p
		°	°			
12017	12 8.588	173	+26	12	2	1
	12 9.742	175	+28	84	5	3
	12 10.590	175	+27	132	3	3
	12 11.700	178	+26	48	1	1
	12 13.674	177	+28	165	10	4
	12 14.678	174	+28	177	33	6
	12 15.744	175	+28	290	20	8
	12 16.756	175	+28	448	9	4
	12 17.719	175	+28	355	12	5
	12 18.593	176	+28	217	6	3
	12 19.592	171	+30	97	1	1
12018	12 9.742	207	+28	32	2	2
	12 10.590	205	+26	24	1	1
12020	12 15.744	193	−17	16	2	1
	12 16.756	195	−17	97	1	1
	12 17.719	193	−16	24	1	1
12022	12 12.641	156	−26	32	2	2
12023	12 12.641	127	−16	61	1	1
	12 13.674	128	−17	36	2	2
	12 14.678	128	−16	16	1	1
	12 15.744	129	−16	16	1	1
	12 16.756	128	−18	48	3	2
	12 17.719	128	−16	12	1	1
	12 18.593	132	−12	16	1	1
12024	12 13.674	199	−22	24	1	1
	12 14.678	198	−23	12	1	1
	12 16.756	194	−24	388	1	1
12025	12 13.674	110	−23	12	1	1
	12 14.678	119	−22	12	2	2
	12 15.744	111	−25	24	2	2
12026	12 13.674	148	+24	18	2	2
12028	12 14.678	189	+23	48	9	3
	12 15.744	191	+23	85	7	3
	12 16.756	195	+22	73	1	1
	12 17.719	192	+21	121	4	2
12029	12 14.678	129	−28	30	5	2
	12 15.744	129	−28	52	5	3
12030	12 14.678	84	+14	339	3	1
	12 15.744	78	+14	1050	14	6
	12 16.756	77	+15	1635	15	7
	12 17.719	79	+14	1478	17	5
	12 18.593	82	+14	1575	26	9
	12 19.592	79	+14	1579	30	13
	12 20.603	79	+14	1501	28	11
	12 21.754	80	+14	1211	10	7
	12 22.697	79	+14	968	12	9
	12 23.677	76	+15	744	40	15
	12 24.657	79	+14	641	17	10
	12 25.764	80	+15	473	3	3
	12 26.748	84	+14	485	1	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	*L* °	*φ* °	*A*	*s*	*p*
12031	12 14.678	78	−25	145	1	1
	12 15.744	78	−24	339	3	3
	12 16.756	76	−24	339	2	2
	12 17.719	78	−25	282	4	4
	12 18.593	77	−25	250	4	3
	12 19.592	75	−25	218	5	3
	12 20.603	77	−25	267	4	2
	12 21.754	76	−26	170	2	2
	12 22.697	74	−26	182	3	2
	12 23.677	75	−26	117	6	2
	12 24.657	76	−26	85	3	2
	12 25.764	78	−26	48	1	1
	12 26.748	75	−25	61	1	1
12032	12 16.756	148	+21	48	1	1
	12 17.719	148	+22	72	4	2
	12 18.593	148	+22	22	2	2
	12 19.592	144	+22	12	1	1
12033	12 16.756	58	+36	73	1	1
	12 17.719	62	+35	72	2	2
	12 18.593	66	+34	16	1	1
12034	12 17.719	52	−25	73	1	1
	12 18.593	52	−25	48	1	1
	12 19.592	53	−25	24	1	1
	12 20.603	52	−25	24	1	1
	12 21.754	54	−24	16	1	1
	12 22.697	53	−24	48	3	1
	12 23.677	50	−25	6	1	1
12035	12 17.719	117	−15	12	1	1
	12 19.592	119	−14	12	1	1
12038	12 19.592	33	+15	18	3	3
12039	12 19.592	20	−17	970	2	2
	12 20.603	22	−16	873	3	2
	12 21.754	21	−16	921	3	3
	12 22.697	23	−17	1308	7	5
	12 23.677	23	−17	1082	19	4
	12 24.657	23	−16	888	14	4
	12 25.764	21	−15	1091	6	3
	12 26.748	19	−16	1273	15	6
	12 27.724	18	−17	1152	13	7
	12 28.767	19	−18	745	12	9
	12 29.758	20	−17	545	21	7
	12 30.671	23	−16	775	3	3
	12 31.639	14	−15	97	1	1
12040	12 19.592	13	+16	727	2	1
	12 20.603	11	+18	921	3	2
	12 21.754	7	+18	1115	4	3
	12 22.697	6	+17	2012	20	14
	12 23.677	6	+17	1747	56	18
	12 24.657	7	+17	1125	51	17
	12 25.764	7	+18	1219	23	15
	12 26.748	4	+17	1194	28	11
	12 27.724	4	+16	800	16	5
	12 28.767	6	+16	595	11	7
	12 29.758	8	+15	564	15	5
	12 30.671	12	+16	860	3	3
	12 31.639	20	+17	630	1	1

No.	Date	*L* °	*φ* °	*A*	*s*	*p*
12041	12 21.754	47	−46	48	1	1
	12 22.697	51	−46	145	3	3
	12 23.677	48	−46	80	11	3
	12 24.657	50	−46	72	4	2
12042	12 21.754	46	+13	96	2	2
	12 22.697	46	+13	267	5	4
	12 23.677	45	+13	339	15	4
	12 24.657	45	+13	232	12	5
	12 25.764	48	+15	218	3	2
	12 26.748	49	+14	243	2	2
	12 27.724	52	+14	121	1	1
12044	12 22.697	61	+34	134	2	2
	12 23.677	59	+33	40	3	2
	12 24.657	63	+33	32	2	1
	12 25.764	63	+34	36	1	1
12045	12 23.677	332	−20	32	1	1
12046	12 23.677	326	+34	565	6	3
	12 24.657	321	+35	727	5	2
	12 25.764	330	+34	522	2	2
	12 26.748	330	+34	509	3	2
	12 27.724	325	+34	682	5	4
	12 28.767	325	+34	436	3	3
	12 29.758	326	+35	364	2	1
	12 30.671	320	+35	678	3	3
	12 31.639	319	+36	703	3	3
	1 1.679	319	+36	606	2	2
	1 2.599	318	+36	509	2	2
	1 3.606	318	+36	484	2	2
	1 4.597	318	+36	436	2	2
12047	12 23.677	325	+23	32	1	1
12048	12 24.657	69	−26	32	3	2
	12 25.764	70	−25	432	7	4
	12 26.748	67	−26	1478	14	7
	12 27.724	66	−26	1006	12	2
12049	12 24.657	57	−24	40	4	2
	12 25.764	58	−23	226	5	4
	12 26.748	55	−23	363	7	4
	12 27.724	56	−25	169	2	2
	12 28.767	57	−24	218	3	3
12050	12 25.764	295	+24	145	1	1
	12 26.748	298	+25	97	1	1
	12 27.724	297	+25	97	1	1
	12 28.767	299	+24	73	1	1
	12 29.758	299	+24	73	1	1
	12 30.671	298	+24	73	1	1
	12 31.639	297	+26	61	1	1
	1 1.679	296	+25	96	3	3
	1 2.599	295	+25	156	5	5
	1 3.606	296	+24	100	5	4
	1 4.597	293	+26	72	2	2
	1 5.799	293	+23	32	1	1
	1 6.767	292	+24	24	2	1

TABLE IIIa NUMBERED GROUP SUMMARY

No.	Date	L	φ	A	s	p
		°	°			
12051	12 27.724	283	−21	472	5	4
	12 28.767	285	−22	436	5	3
	12 29.758	285	−22	351	7	3
	12 30.671	284	−21	266	2	2
	12 31.639	285	−21	243	3	2
	1 1.679	283	−21	279	3	3
	1 2.599	285	−22	170	5	2
	1 3.606	282	−21	149	4	3
	1 4.597	286	−21	170	3	2
	1 5.799	286	−24	182	3	2
	1 6.767	281	−18	32	1	1
	1 7.617	284	−18	48	1	1
12052	12 27.724	345	−20	24	2	1
12053	12 27.724	294	+16	16	1	1
	12 28.767	295	+17	80	4	2
	12 29.758	286	+17	86	5	5
12054	12 27.724	270	+20	533	2	2
	12 28.767	275	+19	581	12	4
	12 29.758	278	+19	339	4	2
	12 30.671	273	+20	883	11	6
	12 31.639	275	+20	1344	18	7
	1 1.679	272	+20	2009	21	10
	1 2.599	270	+19	1999	26	9
	1 3.606	270	+20	2425	20	10
	1 4.597	270	+19	2217	23	12
	1 5.799	270	+17	2876	19	9
	1 6.767	270	+17	1812	33	11
	1 7.617	269	+18	2593	16	9
	1 8.603	269	+18	1587	9	5
12055	12 29.758	334	−19	22	7	2
12056	12 28.767	333	+47	24	2	2
12057	12 29.758	326	+21	24	5	2
	12 31.639	327	+23	36	1	1
12058	12 28.767	320	−15	24	3	2
	12 29.758	315	−13	38	5	3
	12 30.671	315	−12	24	2	1
	12 31.639	317	−11	73	3	1
	1 1.679	321	−12	32	1	1
	1 2.599	318	−12	92	4	4
	1 3.606	319	−11	120	3	3
	1 4.597	320	−10	73	1	1
12059	12 28.767	300	+30	209	4	4
	12 29.758	300	+30	245	10	6
	12 30.671	298	+29	250	6	5
	12 31.639	298	+31	250	7	5
	1 1.679	297	+31	270	8	6
	1 2.599	295	+31	206	5	3
	1 3.606	299	+30	387	8	4
	1 4.597	299	+29	395	7	5
	1 5.799	301	+26	436	3	2
	1 6.767	296	+27	145	2	2
12060	12 29.758	271	−36	48	7	2
12061	12 29.758	267	+23	472	18	6
	1 1.679	258	+27	24	1	1
	1 2.599	256	+28	64	2	2
	1 3.606	258	+26	48	1	1
	1 4.597	257	+36	16	1	1
12062	12 29.758	255	−24	12	1	1
12063	12 31.639	236	−16	61	1	1
	1 1.679	236	−16	32	1	1
	1 2.599	238	−16	16	1	1
	1 3.606	233	−18	48	2	1
	1 4.597	233	−18	32	2	1
12064	12 31.639	218	−21	339	2	1
	1 1.679	219	−21	242	1	1
	1 2.599	220	−22	274	2	2
	1 3.606	219	−21	226	2	2
	1 4.597	222	−21	218	3	3
	1 5.799	220	−21	218	2	2
	1 6.767	217	−22	121	3	3
	1 7.617	220	−21	182	1	1
	1 8.603	220	−21	194	1	1
	1 9.733	218	−22	121	1	1
	1 10.632	219	−21	145	1	1
	1 11.713	221	−21	170	1	1

TABLE IIIb UNNUMBERED GROUP SUMMARY

Date	L	φ	A	s	p
	°	°			
3 12.727	198	+21	24	2	2
5 10.710	129	−15	24	1	1
8 4.574	145	−25	12	1	1
10 1.575	1	+31	16	1	1

TABLE IV RECURRENT GROUPS

Group	Recurrence of		
11431	11400		
11461	11439		
11462	11440		
11472	11443		
11480	11453		
11508	11470		
11509	11467		
11511	11466		
11516	11473		
11517	11472		
11525	11480	11453	
11526	11495		
11538	11493		
11556	11509	11467	
11567	11524		
11606	11558		
11612	11556	11509	11467
11613	11561		
11639	11608		
11643	11603		
11648	11606	11558	
11655	11629		
11660	11626		
11662	11627		
11676	11641		

Group	Recurrence of	
11742	11712	
11754	11717	
11779	11729	
11781	11730	
11807	11756	
11809	11751	
11823	11769	
11824	11772	
11830	11754	11717
11855	11776	
11861	11783	
11883	11797	
11920	11872	
11930	11878	
11948	11887	
11958	11905	
11990	11944	
11991	11941	
12002	11948	11887
12003	11953	
12009	11961	
12031	11974	
12040	11981	
12050	11993	
12064	12009	

Errata

Circular	Page	Date	Item	Line	For	Read
69	2	Apr. 3, 1956	Number	11	11530	11535
69	7	Apr. 27, 1956	Number	17	11588	11597
69	7	Apr. 27, 1956	Number	18	11588	11597
71	4	June 17, 1956	Entire line	27	ΔL, φ, ρ, A, s	+28, +14, 32, 6, 2
72	5	Aug. 13, 1956	Number	15	11745	11739
73	6	Sept. 14, 1956	Number	8	11825	11823
75	10	Nov. 21, 1956	Number	22	11974	11979
76	12	Dec. 31, 1956	φ	17	16	26

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